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Public Health

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CORPORATION OF GLASGOW

Health and Welfare Department

SCHOOL HEALTH SERVICE

REPORT

ON THE

**Medical Inspection and Treatment
of School Children**

FOR THE YEAR ENDED 31st DECEMBER, 1966

*(Reprinted from the Report of the Medical Officer of Health
for the year 1966).*



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PREFACE

This Report on the work of the School Health Service is for the calendar year ending 31st December, 1966. The statistics for the school year ending 31st July, 1967 have been prepared separately and submitted to the Scottish Home and Health and Scottish Education Departments.

Health teaching has rapidly expanded and now 16 doctors are employed part-time in this duty in addition to the full-time school medical officer/health visitor teams. Ten primary, thirty secondary, six special and two approved schools are so far receiving talks as well as three colleges of further education. This, of course, is in addition to the periodic visits made primarily for the purpose of medical supervision.

The consultant surgeon to the Service draws attention to the increasing number of children suffering from spina bifida. These children indicate a problem that the education departments may well be facing in the future in catering for their education. Many of them are intelligent and as a result of modern therapy can now be taught to walk with, of course, suitable aid. It is anticipated that every year approximately 40 cases of spina bifida with paralysis will be accepted into the educational system. The design of future comprehensive schools should take this into consideration.

The cleanliness of school children has given some concern during the year. Despite the constant attention which has been given to this matter cleanliness of heads does not improve and it is found that in many cases reinfestation occurs within a very short time. In the case of boys over 4 per cent. of the 13-year-olds were found to have nits in their hair and in girls 12 per cent.

The Chief Dental Officer reports an upward trend in advanced dentistry and also an increase in the general work of the dental clinics.

During the year the usual five-yearly survey of housing information relating to children in specific age groups was obtained at the routine medical examinations in school by medical officers and the details appear in this Report.

A. R. MILLER,
Medical Officer of Health.

CONTENTS

PREFACE	iii
GENERAL INTRODUCTION	vi
LIST OF STAFF	xi
GENERAL STATISTICS	122
SYSTEM OF MEDICAL INSPECTION AND TREATMENT	122
PARTIALLY-SIGHTED CHILDREN	123
KEYSTONE VISION TESTING	125
NEUROLOGY SERVICE	125
REPORT OF CHILD GUIDANCE WORK	126
SPECIAL EDUCATIONAL TREATMENT FACILITIES	128
ASCERTAINMENT OF MENTAL HANDICAP	130
HEALTH EDUCATION SCHEME IN SCHOOLS	131
MEDICAL SUPERVISION IN F.E. COLLEGES	133
SPECIAL CARDIAC CASES	133
ORTHOPAEDIC AND POSTURAL DEFECTS	134
AUDIOMETRIC SURVEY UNIT	135
NURSERY SCHOOLS	137
SCHOOL DOCTOR IN COMPREHENSIVE SCHOOL	139
SCHOOL DOCTOR IN JUNIOR SECONDARY SCHOOL	141
PROBLEM OF CLEANLINESS	142
DEVELOPMENTAL PAEDIATRICS	144
HEALTH VISITING AND SCHOOL NURSING	145
ACCIDENTS TO SCHOOL CHILDREN	147
SPEECH THERAPY	149
IMMUNISATION CAMPAIGNS IN SCHOOLS	150
PREVENTION OF TUBERCULOSIS	151
RESIDENTIAL SCHOOLS	153
ARRANGEMENTS FOR FEEDING AND CLOTHING	154
ARRANGEMENTS FOR PHYSICAL EDUCATION	156
DENTAL INSPECTION AND TREATMENT	157
GOITRE SURVEY	159
SANITARY CONDITION OF SCHOOLS	160
HISTORICAL NOTE ON GLASGOW SCHOOLS	160
HOUSING SURVEY	162

STATISTICAL APPENDIX

TABLE I.—Total number of children examined	...	...	177
II.—Average heights and weights	...	...	177
IIa Number and percentage of children with defects			177
IIb Additional information regarding results of systematic examinations	...	...	184
III.—Classification according to remediability of major defects	...	...	186
IV.—Social Group and medical class	...	...	188
V.—Summarised treatment statistics	...	...	189
VI.—Dental inspection and treatment	...	...	190
VII.—Mortality of school Children	...	...	192

GENERAL INTRODUCTION

Health teaching has rapidly expanded during the Session and now sixteen part-time doctors give talks in primary schools, secondary schools, special schools, approved schools and colleges of further education. Health visitors give talks in sixteen other primary schools and in eighteen secondary schools. In addition, the school medical officer/health visitor teams give health instruction at the various colleges of further education in the course of their periodic visits of medical supervision.

During the early part of the year, a *poliomyelitis* "spotter" scheme was set up in nursery schools and day nurseries. Two early cases of poliomyelitis carrier state were discovered by the virologist through this scheme. An indication of active poliomyelitis virus in the young population was thus determined. However, a massive poliomyelitis vaccination drive by the Health and Welfare Department, well supported by the public, ensured freedom from this disease during the year.

Drug addiction amongst adolescents has been causing a problem in large cities of England, but as yet the City of Glasgow appears to be relatively free. An approach has been made to the Professor of Pharmacology of the University of Strathclyde regarding the possibility of examination of urine specimens from delinquents for possible contents of Amphetamine and other drugs. Representatives from the University are at present looking into the technical details of the tests which are based on gas chromatography.

The consultant surgeon to the Service remarks, in his section of this Report, on the increasing number of children with *spina bifida* now being treated at school clinics. These, representing as they do, a relatively small proportion of the total number in Glasgow, indicate the problem that the education authorities will be facing in the future. Many of these children are intelligent and, with adequate therapy, can be taught to walk using calipers and crutches. It is, however, expected that every year from now on approximately forty cases of spina bifida with paraplegia will, in addition, be accepted into the educational system. A special centre for these children will be needed with a higher proportion of nursing staff than is normal at a special school and with physiotherapy services available. The design of future comprehensive schools should make allowance for the provision of

adequate lifts. It should be borne in mind that whereas, in the past, most of these children either died early in life or were severely mentally handicapped, nowadays with the advance of paediatric surgery this is no longer so.

The problem of cleanliness of school children has given some concern during the year. In the case of boys nits were found in 4·1 per cent. of entrants and 4·2 per cent. of thirteen-year-olds. The position, as regards girls, is that 10·4 per cent. have nits on school entry at five years of age and 12 per cent. at the thirteen-year-old examination. These figures make depressing reading when one considers the constant attention which has been given to this matter over the years. It is hoped that the health education programme will help in the eradication of this problem.

The *neurological services* are now well established and are proving of great value to the school medical officer and the child guidance psychologist. The E.E.G machine is now in regular use. The neurologist is at present investigating cases of dyslexia in co-operation with the principal psychologist.

The chief dental officer reports an upward trend in *advanced dentistry*. He states that during 1966 twenty-six crowns, thirty-four inlays and sixty-three root treatments were carried out. The large increase in root treatments for the year is a result of the refresher course for dental officers held in May, 1966.

The *diphtheria/tetanus and poliomyelitis campaigns* were once again successful. This year the campaigns were held concurrently which proved to be of value in staff deployment. This type of arrangement had been previously banned by the Central Authority, but in 1966 the Advisory Committee to the Government decided to allow concurrent campaigns as the incidence of poliomyelitis is nowadays very small.

Courses were attended by staff released from duty for the purpose. One medical officer attended a course on audiology and deafness at Manchester during a week in March. Another attended a refresher course on paediatrics in London during a period of just under six weeks in the summer. Three others attended a course during three weeks in October at Glasgow University dealing with the ascertainment of mental deficiency. A Seminar in London to discuss prevention of mental ill-health by public health programmes was attended by a medical officer and a health visitor during a week in July.

Lectures by medical staff continued to be given to pupils training for the S.R.N., the District Nurse's qualification, and also to students of the School Meals Service. The Principal Medical Officer attended the Conference of the National Association for Maternal and Child Welfare in London on 30th June and gave an address entitled "The Glasgow Scheme of Health Talks in Schools and Colleges."

Projects involving co-operation of the staff included the following. In connection with the controlled testing of Gamma Globulin contacts, doctors reported to the Medical Officer of Health cases of infectious hepatitis. Medical staff co-operated with Strathclyde University by summarising conditions in certain districts to provide information for a Social Survey. Medical and nursing staffs were again asked to co-operate in the National Survey of Health and Development in which from 1946 there has been a follow up of 5,000 babies through adult life.

Survey of Housing Conditions.—The usual five-yearly survey of housing information (relating to children in specified age-groups) obtained at routine medical inspection in schools by school medical officers appears in this Report.

Published articles by members of the staff during 1966 were as follows :

"The Keystone School Vision Screening Test. A Review of Visual Abnormalities found following a Survey of four Schools in Glasgow." T. S. Wilson and M. P. Menzies. *The Medical Officer*, Vol. 115, No. 4, pp. 46/7.

"Guthrie Test for Phenylketonuria (P.K.U.). A Survey of Special Schools and Occupational Centres in Glasgow." T. S. Wilson, M. P. Menzies and J. Scott. *The Medical Officer*, Vol. 115, No. 13, pp. 171-174.

"Scottish Local Health Authorities—Medical Staffing as at January, 1966." T. S. Wilson. *Health Bulletin* 24, 3 pp. 81-84.

"Portrait of a School Doctor." T. S. Wilson. *Family Doctor*, February, 1966.

"Sudden Bilateral Deafness and Mumps in Childhood." Margaret Dunn. *The Medical Officer*, Vol. 115, No. 15, pp. 198/9.

It is a pleasure once again to acknowledge the support and encouragement of the Conveners and Members of the Health and Welfare and Education Committees and to thank the Director of Education, his staff and the teachers for their ready co-operation in the work of the School Health Service. Without this ready co-operation little could be achieved.

I would like to thank members of the School Health Service for their continued loyalty and collaboration. In particular, I wish to thank the many contributors to the Report for their excellent material and Mr. James A. Stewart, Assistant Administrative Officer, for his help in collecting the statistical information.

T. SCOTT WILSON, M.D., D.P.H., D.I.H., D.P.A.,
Principal Medical Officer.

LIST OF STAFF AS AT 31st DECEMBER, 1966.

(a) Whole Time Staff—

1 Principal Medical Officer ; 2 Assistant Principal Medical Officers (1) ; 23 School Medical Officers (2) ; 1 Chief Dental Officer ; 17 School Dental Officers (3) ; 1 Superintendent Health Visitor for Schools ; 83 School Nurses (comprising 48 Health Visitors and 35 other Nurses, 8 of whom were employed as Cleanliness Inspectresses) (4) ; 11 Speech Therapists (5) ; 10 Physiotherapists (including 1 Superintendent and 3 Physical Training Teachers) (6) ; 2 Occupational Therapists (7) ; 4 Audiology Technicians ; 1 Dispensing Optician (seconded by the Western Regional Hospital Board) ; 5 Dental Technicians ; 4 Dental Auxiliaries (8) ; 20 Dental Surgery Assistants (9) ; 1 Assistant Administrative Officer ; 26 Clerks and Typists (10).

(¹) *Dr. John D. Leonard promoted 1.5.66.*

(²) *Drs. James Murdoch, Myrtle Farquharson and Marjorie MacBeath resigned respectively on 31.5.66, 21.6.66 and 21.7.66. Drs. Joseph Swan and David Williamson were appointed on 27.6.66 and Drs. Colin Brown and Ellen McIntyre on 15.8.66.*

(³) *Messrs. Archibald Hogg and John McEwan were appointed respectively on 24.1.66 and 29.8.66. Mrs. Dorothy McDiarmid retired 6.12.66.*

(⁴) *14 Nurses were appointed and 12 left. In addition to the staff shown, 6 Health Visitors on a year's contract were employed and 2 Nurses were seconded from the Divisions to act as Cleanliness Inspectresses.*

(⁵) *5 Speech Therapists were appointed and 7 left.*

(⁶) *2 Physiotherapists were appointed and 2 left.*

(⁷) *1 Senior Occupational Therapist left and 1 was appointed as replacement.*

(⁸) *1 Dental Auxiliary left and 1 was appointed.*

(⁹) *4 Dental Surgery Assistants were appointed and 4 left.*

(¹⁰) *5 Office Staff were appointed and 3 left.*

(b) Part-time Staff—

26 School Medical Officers (1) ; 1 Anaesthetist ; 1 Dental Officer ; 1 Dental Surgery Assistant ; 1 Speech Therapist ; 22 Consultants (2).

(¹) *Includes 16 Medical Officers giving health talks in schools.*

(²) *All are seconded to School Health Service work by arrangement with the Western Regional Hospital Board (10 Oculists, 6 Aurists, 1 Cardiologist, 1 Dermatologist, 2 Anaesthetists, 1 Orthopaedic Surgeon, 1 Neurologist).*

Local doctors and dentists undertook emergency duties at the residential schools and at Mossbank and Balrossie Approved Schools in accordance with separate arrangements made with the local Executive Councils.

GENERAL STATISTICS

Number of Schools at 31st December, 1966.

(a) Primary	207
(b) Secondary	73
(c) Schools for Handicapped Children	24
(d) Occupational Centres	11
(e) Approved Schools	2
(f) Residential Schools	13
(g) Nursery Schools	49
(h) Hospital Schools	9
(i) Agricultural Schools	1
(j) Gardening Schools	1
Total Schools Under Education Authority	<u>390</u>
(k) Schools in receipt of Grant and under Medical Inspection	<u>10</u>
	<u><u>400</u></u>

The average number of children on the register of all schools was 173,505 and the average number in attendance during the year was 154,008 (88.8 per cent.).

SYSTEM AND EXTENT OF MEDICAL INSPECTION AND TREATMENT.

INSPECTION.

Routine medical inspection in ordinary schools was given to (1) children in the Infant Department who had not previously been inspected systematically; (2) 13-year-olds; (3) 16-year-olds; (4) 9-year-olds (testing of vision only by doctor/health visitor team) and (5) 6-year-olds (testing of hearing by audiometricians). Vision testing of all age-groups by means of the Keystone Vision Screener was undertaken by nurses in selected schools. Routine medical inspection was also given in schools and classes for handicapped children.

Other arrangements were broadly similar to those which operated last year.

TREATMENT.

A list of the school clinics and services given are as follows :—

CLINIC	Skin, Eye, Ear and other minor diseases	Refraction	Dental	Special Skin	Ultra-violet ray	Orthopaedic	Scabies Baths
80/90 Kinfauns Drive, W.5	1	1	2	—	—	1	—
18 Pleas Street, W.4	1	—	1	—	—	—	—
4 Sandy Road, W.1	1	1	1	—	—	—	—
130 William Street, C.3	1	—	1	1	—	—	—
91 Denmark Street, N.2	1	1	2	—	—	—	—
Hyde Park School, N.1	1	1	1	—	—	—	—
15 Glenbarr Street, N.1	1	1	4	—	1	1	1
60 Avenuepark Street, N.W.	1	1	1	—	—	1	—
40 Grovepark Street, N.W.	1	1	1	—	—	—	—
2 Lochdochart Road, E.4	1	—	—	—	—	—	—
5 Craiglockhart Street, E.3	1	—	—	—	—	—	—
74 Wellhouse Crescent, E.3	1	1	—	—	—	—	—
155 Crail Street, E.1	1	1	2	—	—	—	—
23 Acorn Street, S.E.	1	1	—	—	—	—	—
10 Redan Street, S.E.	—	—	1	—	—	—	—
22 Arnprior Quadrant, S.5	1	1	—	—	—	—	—
Ashtree Road S.3	1	1	—	—	—	1	—
Calder Street School, S.2	—	—	1	—	—	—	—
26 Florence Street, C.5	1	1	2	—	1	1	1
Netherplace Road, S.W.3	1	1	1	—	—	—	—
74 Berryknowes Road, S.W.2	1	—	—	—	—	—	—
Fairfield School, S.W.1	—	—	1	—	—	—	—
St. Anthony's School, S.W.1	1	—	—	—	—	—	—
29 Govan Road, S.W.1	1	1	1	—	—	—	—

A new clinic at Ashtree Road, Pollokshaws, was opened on 7.11.66, and the Harriet Street Clinic was discontinued from the same date.

Other treatment facilities provided were as before.

PARTIALLY-SIGHTED CHILDREN.

The most important event of the year has been the setting up of a working party by the Secretary of State to consider the problems associated with the education of partially-sighted children and to make recommendations.

Glasgow is well represented on this committee and we all look forward to hearing the suggestions for dealing with the main problems which these groups present.

Some of the main difficulties as far as partially-sighted children are concerned have been the small numbers involved, the need for parental guidance before the child reaches school age, and the extreme difficulty in placing these children in suitable employment when they leave school.

There is a real need for the adoption of a more uniform standard for certification of partially-sighted children throughout the country so that the problem can be more realistically assessed. It would appear that one of the most hopeful suggestions when dealing with this problem is the formation of larger groups of those children than most local authorities can collect. The standard of vision at present employed in Glasgow for certification is as follows :—

6/6 6/9 6/12 6/18	Educated as normally sighted.
6/24	Marginal group. Some will benefit from a normal education and some not.
6/36 6/60	Partially sighted for education.
5/60 4/60 3/60	Blind for the purpose of education but not on Blind Register.
Less than 3/60	On Blind Register.

Visual Acuity considered is the best binocular vision with correction and assuming a full visual field.

This is not the only or necessarily the best system, but by its use all medical officers can make a preliminary assessment of a child's visual grading. Once the ophthalmologist has confirmed what is the best visual acuity a more positive grading can be made.

In all cases, but especially those in the border-line groups such as 6/18 and less than 6/60, other factors must be taken into consideration such as intelligence quotient, home conditions, school attendance record and, most important of all, evidence of the child's progress at school. It will thus be evident that while the assessment is primarily a visual one, it is not solely a medical problem but that the psychologist, health visitor and school teacher are all actively involved. By building a strong case for the transfer of any child based on factual information rather than clinical or general impression the problems associated with certification such as parents obtaining conflicting advice should be minimised.

The Department is indebted to Dr. William Wilson, Consultant Ophthalmologist, for the above notes and for his advice and assistance during the year.

KEYSTONE SCHOOL VISION SCREENER.

Three of these machines are now being used in selected schools to test the vision of the children (all ages) who are in attendance. For the year to 31st December, 1966, the numbers dealt with and the results were as shown :—

	Boys	Girls	Totals
Number tested	5,945	5,388	11,333
Number passed test	5,107	4,532	9,639
Number referred for refraction ...	735	808	1,543
Number with colour vision abnormality	103	48	151

NEUROLOGY.

To Dr. Ivan T. Draper, Consultant Neurologist, we are indebted amongst other things for the following note :—

The Neurological Service has continued to expand during the past year. Originally it was thought that one session a month would be sufficient, but this was an underestimate.

Routine clinics are now held every week at the Cowcaddens Clinic, Callander Street, where an 8-channel Mingograph E.E.G. Machine has been installed. Miss Lamont attended a training course for E.E.G. technicians at the Institute of Neurological Sciences, Killearn, and is now responsible for maintaining and operating the machine. Electroencephalography in young children presents considerable technical difficulties, and two or three hours may be required for a recording, which with an adult patient would occupy 20 or 30 minutes. Similarly, the interpretation of records has its own problems. Eventually, with more routine recordings on children with developmental disorders, it is hoped that this technique will provide not only a diagnostic but also a prognostic tool.

The increased time available at the clinics has made it possible to bring some children back for review and in this way it is hoped that more will be learnt about the development of handicapped children. Some conditions which have been described as distinct syndromes appear to be developmental arrests or diversions which later merge into other disabilities or into normality. Dyslexia probably falls into this category. Mild degrees of so called dyslexia may be part of the normal acquisition of reading and writing skills. Under the influence of a variety of pathological conditions an arrest in development at this stage gives rise to the clinical entity which is called "specific dyslexia."

Its response to treatment might be expected to depend upon matching the therapeutic technique with the under-lying pathology. A study of this problem will be part of the work to be undertaken in conjunction with Mr. Dell of the Child Guidance Service.

CHILD GUIDANCE SERVICE.

During the session ending June, 1966, the Child Guidance Service lost seven experienced clinicians, mostly to other posts; and since it takes years of experience to make new recruits fully effective, it will be appreciated that a phase of change is now under way.

To start with, the number of children seen at the clinics was 6,010, more than 5 per cent. less than last year and about the same as the year before that. Attendances totalled 36,977; school visits were 5,067 and homes were visited on 2,043 occasions. We should like to see a steady expansion of this last mentioned social service which is presently undertaken by 17 part-time health visitors seconded from School Health Service.

Most children are sent to us for behaviour disorders, learning difficulties and personality problems, in that order—and many of these also include developmental or environmental factors, amounting in some cases to very complicated and disturbed histories. Some idea of what this represents in terms of "symptoms" may be gathered from the following extracts:—enuresis and encopresis 680; psychosomatic illness 296; temper tantrums and unruliness 391; shyness, inhibitions and avoidance reactions 343; sleeping or feeding difficulties 266; aggression, violence and defiance of authority 524; theft 357; weepiness and dependence 214.

In addition to these group totals there is a further category of children examined as part of the ascertainment procedure for special educational treatment. Many of these cases require extensive interviewing, and during the year the new official form "MH2" came into use as a record of the examination and recommendations. While it adds to the burden of documentation, Form MH2 should serve to make more readily available the relevant information on which decisions about ascertainment need to be made. The psychological examination of physically handicapped children requires a special technique, and is particularly difficult in view of the pressing need for early ascertainment of such cases. This work is carried out by a very experienced member of the Service who also visits the Balvicar Centre and other appropriate centres outwith the administration of the Education Committee.

With slight variations, sources of referral totals show that the percentage against each main category remains steady : about 57 per cent. come from schools, 12 per cent. from School Health Service, 13½ per cent. from Special Schools Department, 6 per cent. direct from parents or relatives (a slight increase), 5 per cent. from Health and Welfare and the remaining 6 per cent. from a variety of sources (mainly public departments or hospitals).

Tutorial groups for maladjusted children who also require urgent attention for school failure are now established in 5 clinics, with the prospect of further extensions in the new session. Among such pupils are found certain "school refusals," a number of well-defined "school phobias," and other disturbed children whose daily attendance at clinic thus allows for the personal attention of the resident psychologist as and when required. The provision of our first day school for the maladjusted should be a reality in the coming session, and on a more specific level, a unit for "dyslexic" children is being organised at our Knightswood Clinic, and will be functioning as soon as a nucleus of appropriate cases can be formed.

Unhappily we have still to report slow progress in the re-establishment of our residential clinic at Nerston : while this situation remains, our City staff will continue to adapt day methods to accommodate many children whose adjustment would have been more efficiently met by residential placement. Indeed this gap at local level highlights the marked lack of facilities of this kind everywhere in Scotland for children of all school ages. In recent years, Glasgow has placed primary pupils in Dr. Barnardo's Craigerne School at Peebles, Harmeny House in Midlothian, and secondary pupils at Lendrick Muir School in Kinross. But since pupils go to these centres from all over Scotland, competition for places is very keen and the waiting time is often at least a year for recommended cases. Even when Nerston is opened, this City could profitably use another similar centre elsewhere and when possible, a further residential school for disturbed pupils beyond the 12-year-old level.

Since our last note there has been outlined in the Annual Report to the Director of Education what are today regarded as the functions of a comprehensive Child Guidance Service, such as Glasgow's has always aimed to be. These are summarised now :—individual casework (of which some of the figures above give the picture)—organisation of varied forms of educational treatment—consultation with other case-work agencies—advisory work in schools—advisory work in selection procedures — educational research — public relations — community

service—training—miscellaneous demands. “ Few of these functions are solely the concern of a Child Guidance Service . . . but a well balanced service should try to equip itself to meet as many of these demands as local conditions permit.”

The team work of many disciplines is gratefully acknowledged annually in this Report : in particular we must mention the valuable help of Dr. T. S. Wilson, Dr. Menzies and their colleagues ; Dr. Draper, Neurologist, Dr. Stone, Dr. Wardrop and their colleagues ; and all others who contribute weekly to the steady flow of investigation and treatment undertaken by this Department.

To Mr. J. Mackenzie, Depute Principal Educational Psychologist, who contributed this section of the Report and for much other assistance we are most grateful.

HANDICAPPED CHILDREN AND SPECIAL EDUCATIONAL TREATMENT.

Miss B. S. Watson, Adviser in Special Education.

The Education Committee makes a wide range of provision for handicapped children. The assessment of the needs of these children requires close co-operation between the Education Department, the Child Guidance Service and the School Medical Service. In certain cases also advice is sought of the various consultants and specialists allocated by the Western Regional Hospital Board.

Educational provision is made as follows :—

A. CHILDREN WITH VISUAL DEFECTS

1. *Blind.* 24 Protestant children attend the Royal Blind School, Edinburgh, as boarders. 12 Roman Catholic children attend St. Vincent's (Tollcross) School as day pupils or boarders. This school also has on roll 17 children from other parts of Scotland.
2. *Partially Sighted.* One day school provides for a total roll of 59 children.

B. CHILDREN WITH DEFECTS OF HEARING

1. *Deaf.* Two schools make day and boarding provision for children from Glasgow and other parts of Scotland. The total roll of 115 includes 48 Glasgow children.

2. *Partially Hearing*. One day school and one day/boarding school have a combined roll of 94 children of which 77 are from the Glasgow area.
3. *A Speech Reading Unit* gives the services of four peripatetic teachers of the deaf to approximately 100 children who, in spite of a hearing loss, can attend ordinary schools.
4. In addition, two teachers of the deaf are seconded to the Audiology Unit at the Maternity and Child Welfare Centre at Balvicar Street for the purpose of assessment of suspected deafness in very young babies.

C. PHYSICALLY HANDICAPPED CHILDREN

1. *General Disabilities*. 10 day schools provide for 240 children.
2. Children suffering from *cerebral palsy* and requiring intensive therapy attend a day school with a nursery section. Roll 45.
3. A nursery class is available for children suffering from deformities probably caused by *thalidomide*. Only four children are left in the group.
4. A scheme of Home Tuition is available for children unable to attend school. At present 30 children are taught at home by visiting tutors.

D. MENTALLY HANDICAPPED CHILDREN

1. *Educable*. 19 day schools. Total roll 2,916. One residential school providing 45 short term places.
2. *Trainable*. 11 occupational centres. Roll 434.

E. OTHER PROVISION IN GLASGOW

1. Non-communicative children are taken from the age of 3 years in a small group in one of our schools for the physically handicapped. There are 16 on roll.
2. *Hospital Schools* are established in hospitals where children are undergoing treatment. There is a total roll of 263. One of the units which was taken over by the Education Authority early this year deals with severely disturbed children requiring psychiatric treatment.

F. PROVISION MADE BY OTHER BODIES

1. Advantage is taken of this provision in the case of very small numbers of children who cannot fit into our own local provision. These children may require residential education because of multiple handicap, inadequate homes, the need for close medical care, etc. Total number 120.
2. Mentally handicapped children who present serious behaviour problems at home and in school may be sent to hospital for long term care. There are generally about 70 such children placed in six suitable hospitals.

Further Education, Youth Employment Services and After Care are available for school leavers from the age of 16 years.

The Education Department is indebted to the Principal Medical Officer for Schools and his assistants for the full measure of co-operation they give in all matters relating to special educational treatment. Their advice and assistance are invaluable when the assessment and placement of handicapped children are under consideration

ASCERTAINMENT OF MENTAL HANDICAP.

During the year 838 children (430 boys and 408 girls) were examined for the first time as regards classification of mental handicap and there were 1,786 re-examinations (982 boys and 804 girls).

Other details are :—

- (1) Number ascertained and transferred to special schools or classes, 158 boys and 122 girls—total 280.
- (2) Number ascertained and transferred to junior occupation centres, 20 boys and 22 girls—total 42.
- (3) Number for whom no facilities are available—nil.
- (4) Waiting list for admission to special schools as at 31st December 1967, 46 boys and 42 girls—total 88.
- (5) Number of pupils referred to Health and Welfare Department during the year as section 65 cases, 19 boys and 15 girls—total 34.
- (6) Number of pupils admitted to hospital for care during the year, 9 boys and 11 girls—total 20.

REPORT ON HEALTH EDUCATION.

Dr. M. P. Menzies, Assistant Principal Medical Officer.

Since the Pilot Scheme in 1960, designed to educate young people the better to withstand the stresses of adult life, health education programmes are now a well established section of school health work.

This year, teaching and group discussion within the curriculum has been arranged for 31 primary schools, 48 secondary schools, 8 schools for the handicapped, 2 approved schools and 11 further education colleges. To make this possible all aspects of the work of the Service have been carefully studied and any part deemed wasteful of time according to present-day standards has been terminated in order to make both medical and health visitor staff available. We have also benefited from permission to employ 21 doctors on a sessional basis. For the most part these are married women, who bring a wealth of practical experience.

The Further Education Colleges experience health discussion as part of the Student Health Service we organise but, in addition, courses have been provided where certain aspects have been specially indicated.

Several groups of 5-7 year old children were given short illustrated talks on basic health by one of the doctors and both the interest of the children and the reports from the teachers made this an interesting experiment. The need for help to the more vulnerable groups is shown in the increase in number of schools for the handicapped now taking part. While much of this work is repetitious and basic in content the doctors who carry it out evince satisfaction in the efforts these young people make. The skill and temperament of the health educator is of importance throughout but both have to be of a very special quality to stimulate and maintain interest.

The project of putting ten lessons for the 5-6 year olds on to video tape for beaming to infant schools has continued throughout the year at the Education Television Studios; the health visitor selected to carry out the programme has herself been working on "the staging." We have had assistance from Infants Mistresses where classrooms and pupils have been made available. It was hoped to have these lessons on the air this year but studio space is in great demand.

One of the greatest difficulties encountered was obtaining up-to-date visual aid material in sufficient quantity to keep our increasing

staff supplied. Considerable co-ordination is required to ensure that the rotation and storage of books, films and all other visual aids operates reasonably smoothly. Responsibility for this as well as for ensuring that requests are met from schools and other agencies has fallen on the shoulders of the Superintendent of School Health Visitors and she has made the success of the scheme one of her own special interests.

Now that various groups are considering the recommendations of the Cohen Report on Health Education, criticism is sometimes made of a scheme such as ours being carried out by medical officers and health visitors and there is a good deal of discussion at various levels as to who in fact should be doing this kind of teaching. In the six years of experience gained in group teaching, all staff are agreed that the content of much of the questioning and many of the areas of ignorance are such that a medical background has a very marked place in meeting many situations.

We are particularly fortunate in having the interest and support of the Director of Education and teaching staffs and in many of the schools teachers have become part of the team.

An extension of the methods to help young people in the ordering of their lives began last year when at the request of the Director of Education and with the help of the Senior Administrative Medical Officer of the Western Regional Hospital Board and with the goodwill of the Matrons, a scheme which has been called the "Service in Hospital Scheme" was commenced. Young people between 14-15 years of age, usually those due to leave school at 15 years of age, are given the opportunity of "day release" to a hospital, for one day a week for a period of four weeks. The scheme is designed to teach these young people facets of health, of ill-health and of the many aspects of life seen best of all in a hospital and, through this, of the ways one can give service in the community. The opportunity to take part in the scheme has been enthusiastically taken up by the girls and to a much less degree by the boys. At first it was not seen in some hospitals what part a boy could play; however, with wider understanding of the aims of the scheme some of the matrons and medical superintendents have outlined areas where the boys too can play a part. It came as a gratifying surprise that in this first year of the scheme girls were so enthusiastic as to give up school holidays if matron would permit them on these days to return to their allotted hospital. We try to prepare the young people for this experience and to make use of it in the Health Education Scheme.

MEDICAL SUPERVISION IN COLLEGES OF FURTHER EDUCATION.

Dr. Elizabeth Primrose, School Medical Officer, reports on her work at Barmulloch and Stow College of Engineering.

During the session fortnightly visits were paid by the School Medical Officer and Health Visitor to Barmulloch Further Education College and to the Stow College of Engineering. The purpose of these visits was to carry out routine medical examinations on students taking a full-time course, and, where the curriculum permitted, to give health talks. The pattern of such meetings was varied to meet the needs of each group.

At Stow College groups of fifteen to twenty students were medically examined and afterwards a talk was given or a film shown. This was usually followed by questions and discussion. As most students had received health talks at school, topics of current importance for this age group (16-18 years), namely smoking and venereal disease were dealt with. It was shown that widespread ignorance exists concerning the latter. Special arrangements were made to talk to day-release female students on the physiology of sex and motherhood, with emphasis on the prevention of disease.

At Barmulloch Further Education College male and female students were routinely examined and health talks given to each group of fifteen to twenty students. The girls received talks on personal hygiene, the physiology of menstruation, and discussions followed. By means of a questionnaire, information was obtained regarding the girls' interests and social background. Groups of male students were shown films on smoking and venereal disease. The film, "A Quarter Million Teenagers," was particularly successful and encouraged useful discussion.

It was interesting to observe the appreciation of the students when they were given facts to replace "old wives' tales." There is great scope in this field of health education.

SPECIAL CARDIAC CASES.

Dr. Rogen, Consultant Physician in Cardiology, comments :—

School cardiac clinics continue to function smoothly. It is worth remarking that there is a change in the type of case seen ; fewer cases of rheumatic heart disease and more of congenital heart disease are being picked up.

I reported in the *Glasgow Medical Journal* in November, 1952 the findings of the four years from 1947 to 1951 ; of 917 children examined, 340 were thought to have rheumatic heart disease and 91 to have various forms of congenital heart disease. A further four years' review was undertaken recently and covered the years 1960 to 1963 inclusive. In this time 783 children were examined. Rheumatic heart disease was diagnosed in 59 only and congenital heart disease in 214. This is a most impressive drop in the incidence of rheumatic heart disease. Such a reversed ratio in the incidence of congenital and rheumatic heart disease in those two periods is probably due, in part, to increased specialist skills in the diagnosis of cases of congenital heart disease and in part to improvements in therapy ; for example, the handling of cardiac failure, surgical treatment and chemotherapy of intermittent infection, leading to increased survival rate of cases of congenital heart disease. On the other hand, the lower incidence of rheumatic heart disease must be related to the steady fall in the incidence of rheumatic fever.

ORTHOPAEDIC AND POSTURAL DEFECTS.

Mr. Guest, Orthopaedic Consultant, supplied the following note regarding the work for the year.

The work at Mearns Kirk Hospital has kept at a steady rate throughout the year. It will be noticed from the figures that there has been another large drop in the number of admissions due to the late effects of poliomyelitis, showing how those affected in the outbreaks that occurred in Glasgow in the late 1940's and early 1950's are now entering employment, and leaving the supervision of the School Health Service. Any necessary further supervision of these patients is carried out through the Out-Patient Department of Mearns Kirk Hospital. The School Health Service has proved a valuable medium for the care of these patients, limiting disability and providing early treatment of deformities in the years when these are most likely to occur.

More operations on children suffering from cerebral palsy is another feature of this year's report, indicating the wider use of operations to improve those children who have been under treatment at Kelbourne Spastic School. It is emphasised that operative treatment is only an incident in the course of their therapy and the treatment of cerebral palsy still lies mainly in the hands of therapists and teachers. The work at the spastic school and the screening and selection of pupils and their subsequent assessment and disposal has been continued by the Panel of Consultants.

The increasing number of children with spina bifida now being treated at the school clinics, representing, as they do, a relatively small proportion of the total number in Glasgow, indicates the problem that the Education Authorities will be facing in the future. Many of these children are intelligent and with adequate therapy can be taught to walk using calipers and crutches. It seems likely that since there will be something like forty new cases a year occurring in Glasgow, given a better prognosis by the modern operative techniques of the paediatric surgeons and rehabilitated by modern therapeutic methods, a special centre for these children will be needed with a higher proportion of nursing staff than is normal at a special school, and with a therapist attached to it.

There were 118 children admitted to Mearns Kirk Hospital on one or more occasions during the year. Of these, 15 were admitted for investigation or physiotherapy. 106 operations were carried out as detailed below.

Diagnosis of the 118 cases was as follows :—

Foot deformities, 67 (congenital 11, acquired 22, post poliomyelitis 16, spastic 18). Other conditions due to poliomyelitis, 10 ; torticollis, 3 ; muscular dystrophy, 5 ; cerebral palsy, 18 ; knock-knees, 2 ; osteomyelitis, 1 ; rickets, 3 ; spina bifida, 3 ; thalidomide, 1 ; miscellaneous, 5.

Operative treatment was given as undernoted :—

Manipulations (including tenotomy of the plantar fascia), 28 ; elongation of tendo achilles, 15 ; tenotomy for torticollis, 3 ; tendon transplant, 4 ; stabilisation of foot, 10 ; correction of toe deformities, 12 ; operation for cerebral palsy—adductor tenotomy, 9 ; transplant at knee (Egger's operation), 8 ; arthrodesis of wrist, 2 ; osteotomy for knock-knee, 1 ; stapling for shortening, 10 ; arthrodesis of shoulder, 1 ; miscellaneous, 3 ; total operations, 106.

The average stay in hospital was 34 days.

The number on the waiting list at 1.1.67 was 16.

AUDIOMETRIC SURVEY UNIT.

Dr. Margaret Dunn, School Medical Officer.

The work of the Audiometric Survey Unit expands each year and, as more problems emerge from the ever-widening knowledge of hearing defects, more children come into the ambit of those requiring help.

One necessity in any scheme such as this is to have fully trained staff, and for the staff to be kept abreast of up-to-date developments as regards research and equipment. We are fortunate in these respects and have four school medical officers who have special training in this work, two being attached to the deaf schools as part of their routine duties. The audiometricians have been participating in special courses at the Ear, Nose and Throat Hospital. They have been familiarising themselves with a "Pop-up Toy" audiometer made in the Regional Physics Laboratory under the direction of Miss Knox, the Physicist, and we are indebted to her and her department for their interest and co-operation.

The work of the Otologist continues to expand and many of the cases referred for his opinion are most interesting and also present considerable diagnostic difficulties. The concept of the school medical officer, the health visitor and the otologist working as a team and being present together, is of great benefit and allows for consolidation of counsellings and dissemination of the results to all sources with the minimum of delay.

The cases referred from the routine surveys, i.e. from the children seen because of age and who have failed the sweep test in school, continue to offer interest, as there are children with high tone losses undetected by teacher or parent. It is interesting to note how some children overcome a hearing loss that others cannot and, in this connection, it is again evident this year that there are children being forwarded for consideration for special schools because of educational retardation who indeed have hearing losses. There is a group of particular note in which there have been neonatal difficulties such as (*a*) the premature or damaged child with anoxia; (*b*) where the mother is Rh-ve with antibodies and the child requires transfusion at birth—these children in quite a few instances show up after a year or so at school as slow learners with behaviour difficulties and a hearing loss. It would appear that this first group is increasing in number. I feel that when a child presents as a behaviour and learning problem even without a definite neonatal abnormal pattern, hearing investigation should be performed and there should be a class in the deaf schools for those who are both deaf and mentally handicapped.

There is a new group of children appearing in the clinic and the numbers of these are increasing, i.e. those children with retarded speech development. Much emphasis has been put on the identification of "children who do not talk" as regards early assessment and perhaps this is why there is a rising number. Another factor may be that our

unit is now geared to the testing of such children and so they are referred in greater numbers. As a School Health Service we can accept any child from the age of two who asks for help and at the Balvicar Centre, where the otologist, school medical officer and health visitor team go monthly, referrals are seen below that age.

Some cases are referred from other sources as not deaf, but not speaking. The Kelbourne Aphasia Nursery has proved its worth in accepting a small group of these children on the basis that they are not mentally handicapped and not autistic. The value of this class is immense as regards socialising the children. They gain immeasurably from contact with their coevals and the parents gain assurance from the obvious progress of the child. The infant group is indeed a long term assessment class where the child can be studied by expert teachers and speech therapists and progress details regularly noted and evaluated.

They continue to be reviewed by the otologist and to have audiometry carried out. In some a hearing loss can be demonstrated after a long period of investigation, and this, allied with the language and learning difficulties, can offer a problem of placement.

The Consultant Child Neurologist has given his advice on several children with speech problems and the results of his investigations are very helpful, both as regards diagnosis and placing the child.

The field of deafness in preventive medicine is large and there is no end to its practical application.

NURSERY SCHOOLS.

The usual small outbreaks of childhood infections have been experienced throughout the year, often initiated by the child who arrives in the nursery school with the label of "Adenitis" which is, of course, Mumps, or "Urticaria" which is Chickenpox. This is a constant source of annoyance to teachers-in-charge who are preventive-medicine minded.

Infection may mean that the school will lose its place on the rota for Southannan Residential School at Fairlie, and this is a great disappointment to those children due to go for the holiday.

The attempt by the Education Department to spread nursery school education to a wider group of children by having children in for half a day only has been further increased.

It was thought that Poliomyelitis might return to Glasgow last year and at the request of the Virology Department, Ruchill Hospital, nursery schools took part in a "spotter" exercise. This continued from early in the year until summer and by this means two early cases of the poliomyelitis carrier state were discovered in different geographical areas.

The special nursery school classes for the deaf, partially deaf, spastic and aphasic continued and the thalidomide group lost two of its pupils to ordinary school; both children have settled down and are doing well. The aim of this school has been to assist the children towards enrolment at ordinary school, but in some cases where no prosthesis is supplied, it is proving impossible to give the child skill in desk work or in independent manipulation of clothing for toilet purposes. These two basic needs may demand special education where there is the help of a nurse until the difficulty can be overcome.

During the year ended 31st December, 1966, children in the nursery schools to the number of 1,784 (902 boys and 882 girls) were subjected to "routine" inspection. The results are detailed below.

ROUTINE INSPECTION—NURSERY SCHOOL CHILDREN.

NUMBERS AND PERCENTAGES OF CHILDREN SUFFERING FROM DEFECTS

Nature of defects found					Boys	Girls	Totals
Uncleanliness of head (nits)	...	...	...	...	2	14	16 (0.9%)
Skin conditions of head or body	...	...	...	...	31	24	55 (3.1%)
Defective nutrition	...	...	...	...	7	8	15 (0.8%)
Mouth and teeth unhealthy	...	...	...	...	3	—	3 (0.2%)
Naso-pharyngeal conditions	...	...	...	...	130	98	228 (12.8%)
Eye diseases (including strabismus)	...	...	...	...	26	25	51 (2.9%)
Defective vision (for refraction)	...	...	...	...	2	4	6 (0.3%)
Ear disease (including defective hearing)	...	...	...	...	5	4	9 (0.5%)
Defective speech	...	...	...	...	24	6	30 (1.7%)
Mental and nervous conditions	...	...	...	...	7	6	13 (0.7%)
Defects of circulatory system	...	...	...	...	27	17	44 (2.5%)
Pulmonary conditions	...	...	...	...	28	32	60 (3.4%)
Deformities	...	...	...	...	78	37	115 (6.4%)
Other diseases or defects	...	...	...	...	27	23	50 (2.8%)

CLASSIFICATION OF NURSERY SCHOOL CHILDREN ACCORDING TO
REMEDIABILITY OF MAJOR DEFECTS FOUND IN THE INDIVIDUAL CHILD

Classification	Boys	Girls	Totals
Free from defects	577	626	1,203 (67·4%)
Defects of vision or oral sepsis	5	8	13 (0·7%)
Temporary ailments	154	141	295 (16·5%)
" Curable " defects	96	70	166 (9·3%)
" Improvable " defects	69	36	105 (5·9%)
Defects " not improvable "	1	1	2 (0·1%)
Totals	902	882	1,784 (100·0%)

ADDITIONAL INFORMATION—NURSERY SCHOOL CHILDREN.

Parents were notified of defects found in 406 instances, 115 (6·4 per cent.) of these being due to clothing, cleanliness or minor dental defects, 291 (16·3 per cent.) being in respect of other defects. School medical officers also noted 127 cases (7·1 per cent.) for reinspection as a result of defects observed in clothing or cleanliness or for minor dental defects, and 366 children (20·5 per cent.) having other defects. " Sound teeth " was recorded in 1,339 cases (75·1 per cent.), 1,456 pupils (81·6 per cent.) were recorded as having had complete diphtheria immunisation and 1,050 (58·9 per cent.) as having been successfully vaccinated or revaccinated against smallpox.

THE PLACE OF THE SCHOOL DOCTOR IN A LARGE
COMPREHENSIVE SCHOOL IN GLASGOW.

The pattern of work has changed over the years and Dr. A. J. Peters has commented on this. Some of his thoughts are given below.

The revolutionary changes which are taking place in the comprehensive school today also involve changes in the form of new demands from medical services in their broadest sense.

The school doctor can be the initiator of a vital link between all departments of teaching staff, parents, medico-social workers, attendance officers, hospitals, general practitioners, psychologists, dentists and clinics, to mention just a few.

The pupil presents as the initial focal point from which the school doctor must activate a chain of events rapidly and correctly in a specific direction, thus producing an efficient end result which is of lasting therapeutic benefit to the pupil concerned.

A complete change of clinical field has appeared in modern schools since the physical, mental and social improvement of the present school child. This has created the need for reorientation of thinking and diagnosis in quite different spheres from those found in the past.

Entirely new and superimposed demands have entered as a challenge in the field of preventive medicine, in which the role of the school doctor plays an important part. He must be prepared to recognise them and accordingly deal with them competently if he is going to remain in the privileged position of medical adviser in a school.

The wide programme of vaccination and inoculations done yearly together with the basic routine screening, diagnosing and treatment of childhood complaints must however never be neglected or forgotten, if only for their future statistical value, as they are always present and form a major portion of his work.

In Glasgow, like all great industrial cities, preventive medicine is called forth to attack a multitude of new "syndromes" which have been added to the old lists. Obesity, neurosis, delinquency, immorality, accidents, developmental problems, behaviour patterns, sex, drugs, all enter in varying degrees into the vast and somewhat bewildering complexity of problems arriving at the door of the doctor, whose time in a large comprehensive school is never long enough.

Health education is of vital importance and can, in many instances, have considerable impact on the individual pupil but its value is much harder to assess when delivered to large groups. However, the crucial factor in evaluating the degree of retention by the individual is the inter-personal relationships in which the school doctor can participate enthusiastically. This is essential in what, to the mind of the school child, is a somewhat abstract field of preventive medicine.

The image of the school doctor must be correct if his responsibilities in a large comprehensive school are to be of functional value.

THE PLACE AND FUNCTION OF A SCHOOL
MEDICAL OFFICER
IN A JUNIOR SECONDARY SCHOOL IN GLASGOW.

Dr. Stella M. B. Perry comments as follows :—

Physical handicaps have been greatly reduced and no longer present the major problem, but other problems are emerging and they are more difficult to prevent. The aim of the School Health Service remains the prevention of physical, mental or emotional ill-health.

The School Medical Officer has several roles in a junior secondary school ; he is observer, health instructor and adviser as well as carrying out the statutory medical inspections of 13-year-old children.

The medical officer visits the school throughout the school year, the frequency of the visits depending on the size of the school. At the 13-year-old examination he will note any defect which is likely to affect the child's future ability to earn his living and, as the leaving date approaches, children who are due to leave school are seen for reassessment and given advice which includes the necessity for adequate sleep, food and clothing. On his visits the school medical officer will see any child put forward by parent or teacher who may have noticed some change in the child's appearance, work or behaviour.

As noted before, emotional and mental ill-health seem to be more common today and they are often preceded by "behaviour problems." The reasons for these are many, but one of the most frequent seems to be the environment of the "broken home."

Through visits to the school, talks with staff and parents, observation of children in their school environment, the School Medical Officer has a unique opportunity for studying the growth, in all its aspects, of the child and so come to better understanding and help to prevent the development of all defects.

He has ample opportunity for spreading health education, both in groups and to the individual. He revises the lessons of personal hygiene given in the primary school and goes on to more advanced subjects such as "Care of the Feet," "Prevention of Home Accidents," "Nutrition," "Food Hygiene," "Smoking" and "Alcohol." The children are encouraged to ask questions and take part in discussions.

It is through health education and the study of the child in its environment that we hope to improve the health of the individual, and the junior secondary school gives the School Medical Officer opportunity for this.

CLEANLINESS.

Dr. J. D. Leonard.

The problem of cleanliness among the school population is a constantly recurring one. The aspect of uncleanness most frequently noted is the presence of head nits. The table below shows the numbers of cases of nits found by school medical officers at the routine medical inspection of five-year-old entrants and thirteen-year-olds.

FINDINGS AT ROUTINE MEDICAL INSPECTION

	Boys				Girls			
	Entrants		13 year olds		Entrants		13 year olds	
	No. Examined	Nits Found	No. Examined	Nits Found	No. Examined	Nits Found	No. Examined	Nits Found
1957	9,059	368 (4.1%)	7,955	188 (2.4%)	8,576	1,023 (11.9%)	7,777	1,337 (17.2%)
1958	9,120	378 (4.1%)	7,616	187 (2.5%)	8,590	983 (11.4%)	7,545	1,082 (14.3%)
1959	9,036	381 (4.2%)	7,151	119 (1.7%)	8,628	894 (10.4%)	6,770	948 (14.0%)
1960	9,210	295 (3.2%)	8,272	134 (1.6%)	8,807	905 (10.3%)	8,311	1,061 (12.8%)
1961	9,176	236 (2.6%)	8,751	113 (1.3%)	8,789	764 (8.6%)	9,181	1,071 (11.7%)
1962	9,569	228 (2.4%)	8,091	141 (1.7%)	9,113	830 (9.1%)	7,957	948 (11.9%)
1963	9,846	273 (2.8%)	7,520	194 (2.6%)	9,494	872 (9.2%)	7,566	852 (11.3%)
1964	9,485	261 (2.8%)	7,511	233 (3.1%)	9,249	857 (9.3%)	7,433	947 (12.7%)
1965	9,156	285 (3.1%)	7,216	292 (4.0%)	8,772	800 (9.1%)	7,290	840 (11.5%)
1966	9,021	368 (4.1%)	7,281	304 (4.2%)	8,757	912 (10.4%)	7,425	892 (12.0%)

Examination of the boys' rates shows that between 1957 and 1961 there was a fall in the number of five-year-old boys with nits and this decrease continued into 1962. Since 1962 the rates for the thirteen-year-old boys, however, started to rise and this trend continued through to 1966.

The 5-year-old boys likewise showed a rise in rates from 1963-66. As the figures show, until 1964 infection rates among boys were 50-100 per cent. higher in the 5-year-old age group. Since 1964, however, this has changed and more 13-year-old boys are now infected. One wonders how much this actual and relative increase in uncleanness rates among the older boys is due to the recent tendency among them to wear their hair long.

Among the girls the fall in the rates of infection until 1961 is seen also, but while the 5-year-old girls demonstrate a rise in infection rates between 1961-66 similar to the boys, this is not so obvious with the 13-year-old girls. This latter group has rates of infection which are consistently 20-50 per cent. higher than those for 5-year-old entrant girls. The reason for this is difficult to see other than that infection spreads more readily among children at school.

Comparison of the figures for 13-year-old boys and girls reveals that the rates for the girls have fallen from sevenfold, that of the boys in 1957 to slightly less than threefold in 1966. This improvement is due less to any dramatic improvement in the girls than to a worsening of the boys' figures.

Comparison of the entrant boys and girls shows that the girls have rates of infection $2\frac{1}{2}$ - $3\frac{3}{4}$ times higher than the boys. The reason for this is almost certainly that the girls have longer hair.

It is obvious from the table shown that, in attempting to inculcate habits of cleanliness by health education, the main effort must be directed towards the girls and their parents. The fact that in 1966 more than 10 per cent. of 5-year-old girl entrants were found to have nitty heads at routine medical inspection is indicative that a proportion of parents are careless or ignorant of matters pertaining to health and hygiene.

This emphasis on the approach to the girls and their parents does not infer that the boys should be ignored. In view of the increased number of thirteen-year-old boys with nits the truism that long hair need not be infected hair should continue to be reiterated.

In conclusion, the fact that the problem of uncleanness is still present, is a disappointment to those who are engaged in health education, medical inspection and treatment of school children. It does point the moral, however, that it is not enough for preventive or curative measures to be available: there must be a willingness on the part of the individual or people affected to make use of these.

DEVELOPMENTAL PAEDIATRICS.

Dr. Margaret Dunn.

This is a discipline within the concept of paediatrics which can commend itself, both in its vital importance and in its content, to public health medical officers in the clinical field.

It is a study of the normal and abnormal aspects of a child from conception to maturity. It is a whole philosophy—a way of looking at a child and seeing the child as a whole. If the child is handicapped this view embraces his physical and mental state, his family, his life and his function in the world, and his future prospects. It involves the evaluation of handicaps, and routine examinations to detect errors in locomotion and posture, speech, hearing and vision, and appreciation of the balance of assets and deficits.

The great importance of this area of child health was stressed in the Course of Developmental Paediatrics held under the auspices of the Society of Medical Officers of Health in London in May-July, 1966. The medical officers selected for the course were already well established in the clinical field, and they were offered a vast amount of expert material by lectures, discussion, films, photographs, visits and demonstrations to further the conceptions of this specialty. The speakers included many leading exponents of the subjects under discussion, and offered much that was valuable and pertinent to the whole picture.

It is clearly obvious that skill in assessing the normal and handicapped child is of the utmost importance to the physical, mental and social well-being of the child, and with foresight, to the community. Careful trained attention paid to the young developing child will cause help to be instigated at the requisite moment. A handicapped child means a handicapped family and early detection is vital to helping this whole group to its best advantage.

The preventive services have a vital part to play in this work, their functions being :—

- (a) to identify those requiring help ;
- (b) to assess their disabilities ;
- (c) to co-ordinate the necessary helps ;
- (d) to offer parental guidance ;
- (e) to advise as regards placement ;
- (f) to further preventive techniques.

To this end the personnel must have a knowledge of the normal in order to detect the abnormal, and knowledge of the norms of development including the timing stages of such norms in order to offer assistance at the appropriate age. The prenatal and perinatal risk factors as regards child development should be well understood and, for example, the latest work on rubella kept in view as regards the post natal viability of the foetal virus. The factors involved in prematurity too are well worthy of note, for these children may be at risk for mental handicap, behaviour problems, and learning difficulties.

The full examination of the very young baby and continued detailed regular checks are the corner-stone of this type of work. This demands time, and therefore perhaps a reappraisal of present type of work weighting. Techniques involve examinations coming under the headings, inspection, posture, spontaneous movements, alertness, examination of muscle tone, elicitation of responses (mouthing, Moro reflex, etc.), eye reflexes, motor behaviour, vision and manipulation, speech and hearing, social behaviour and play.

It is obvious that a well-trained staff performing this work can offer the public a service of very vital importance and long-term consequence. It is a challenge to the public health medical officer in the clinical field to gain and use this expertise, stretch his abilities, and perform a work which will satisfy his own function in the preventive sphere, while at the same time the product of this expertise will be to the benefit of all children.

HEALTH VISITING AND NURSING SERVICE.

Miss J. S. Ferguson, Superintendent Health Visitor for Schools, reports on the year's work as follows :—

The number of health visitors (with Superintendent) at the end of the year was 49 and the number of nurses without Health Visitor's Certificate was 35.

Health visitors made 13,441 domiciliary visits—4,595 visits to schools for routine medical inspection ; 439 visits to nursery schools and occupational centres ; 9,278 attendances at clinics ; 221 attendances at child guidance clinics ; 818 attendances at schools for health teaching.

Nurses made 8,659 attendances at clinics ; 2,253 attendances at handicapped schools for general nursing duties ; 2,497 attendances at schools for cleanliness inspection ; 438 attendances at schools for Keystone vision testing.

Eighteen health visitors continued domiciliary visiting for the child guidance clinic in their own area to assess the family as a whole and to give supportive help. They attend case conferences at the child guidance clinics and make their contribution to the work of the clinic.

All *burns and scalds accidents* to school children are reported from the hospitals and visited by health visitors to give advice on home safety. It will be seen from the analysis on page 147 that the number of outdoor accidents has increased. This is mainly due to fires and fireworks in spite of all the exhortations given by the mass media on the care that should be taken in handling fireworks. A new hazard has arisen where abandoned cars are left ; the children play in them and throw lighted matches into the petrol tank. In a recent incident of this kind eight boys received burning injuries.

Children who are absent from school for long periods and receive *home tuition* are visited regularly and supportive help given on request.

Any children in schools giving concern to the teacher are visited on request.

National Child Development Survey. Twenty-eight young persons of twenty years of age, the number remaining from this survey of children born in 1946, were visited by health visitors. As these young people are now working or married, most of this visiting had to be done in the evening.

Health Education in schools has expanded and 18 health visitors take part in teaching in schools within the school curriculum. The schools to which they are attached are in their own area where they are known to school, clinic and home, thus maintaining a liaison between all three.

Extra Mural Activities. Classes for girls entering for the Duke of Edinburgh Awards are given in Child Care and Home Nursing. The number who participated this year was 340.

Requests from women's guilds, Girls' Brigade and other organisations for speakers and examiners are received and health visitors give willing help to these groups.

ACCIDENTS TO SCHOOL CHILDREN.

SURVEY OF BURNS AND SCALDING ACCIDENTS, 1st JANUARY—31st DECEMBER, 1966, AS CONDUCTED BY HEALTH VISITORS OF THE SCHOOL HEALTH SERVICE.

TABLE 1.
NUMBER OF ACCIDENTS.

					5-10 years		10-15 years	
					Boys	Girls	Boys	Girls
<i>Burns—</i>								
Outdoor	...	...	...	...	60	13	49	2
Indoor	...	...	...	...	39	23	12	17
<i>Scalds—</i>								
Outdoor	...	...	...	...	1	3	1	2
Indoor	...	...	...	...	49	40	25	40

TABLE 2.
COMMON TYPE OF BURNING ACCIDENTS.

					5-10 years		10-15 years	
					Boys	Girls	Boys	Girls
Fireworks and bonfires	...	...	...	...	44	8	35	1
Fires (open or electric)	...	...	...	...	11	13	3	—
Sunburn	...	...	...	...	—	1	—	—
Clothing catching fire	...	...	...	...	6	3	1	5
Faulty plugs or appliances	...	...	...	...	5	—	3	3
Cookers	...	...	...	...	2	—	4	4
Electric iron	...	...	...	...	—	2	—	—
Railway electric cables	...	...	...	...	—	—	2	—
Abandoned cars (lighted match thrown into petrol tank)	...	...	...	...	6	—	2	—
Petrol tank of motor scooter in street exploded	...	...	...	...	5	3	1	2
Others (e.g. hot ashes, car petrol)	...	...	...	...	10	6	6	3

TABLE 3.
RESIDUAL DISABILITIES.

					5-10 years		10-15 years	
					Boys	Girls	Boys	Girls
Burns	...	...	...	...	2	—	—	4

TABLE 4.

					5-10 years		10-15 years	
					Boys	Girls	Boys	Girls
Deaths	—	—	—	1

TABLE 5.
BY SOCIAL CLASS.

					5-10 years		10-15 years	
					Boys	Girls	Boys	Girls
<i>Burns—</i>								
No father	...	...	...	...	5	3	6	1
Professional	...	...	...	...	—	1	—	1
Clerical	...	...	...	...	—	—	4	1
Skilled	...	...	...	...	29	10	20	4
Semi-skilled	...	...	...	...	27	13	13	9
Labourer	...	...	...	...	28	9	18	3
<i>Scalds—</i>								
No father	...	...	...	...	2	4	4	3
Professional	...	...	...	...	1	1	—	1
Clerical	...	...	...	...	3	2	1	3
Skilled	...	...	...	...	16	16	4	18
Semi-skilled	...	...	...	...	13	9	11	6
Labourer	...	...	...	...	15	10	6	11

TABLE 6.

ACCIDENT PRONENESS.

Children who have had previous accidents within last 2 years.

		5-10 years		10-15 years	
		Boys	Girls	Boys	Girls
		15	5	11	3

TABLE 7.

PERIOD OF YEAR ACCIDENT OCCURRED.

					5-10 years		10-15 years	
					Boys	Girls	Boys	Girls
January ...	...	...	...	...	12	2	7	5
February ...	...	...	...	...	8	7	5	7
March ...	...	...	...	...	9	7	4	6
April ...	...	...	...	...	6	7	9	7
May ...	...	...	...	...	3	8	—	3
June ...	...	...	...	...	6	3	2	3
July ...	...	...	...	...	8	5	3	3
August ...	...	...	...	...	14	12	6	7
September ...	...	...	...	...	16	6	9	7
October ...	...	...	...	...	22	4	9	7
November ...	...	...	...	...	28	10	27	5
December ...	...	...	...	...	7	7	6	1

TABLE 8.
HOUSING OF PARENT OR GUARDIAN.
(HOME ACCIDENTS ONLY).

					5-10 years		10-15 years	
Rooms					Boys	Girls	Boys	Girls
1	...	...	...	...	4	6	—	—
2	...	...	...	...	17	8	7	7
3	...	...	...	...	26	24	14	22
4	...	...	...	...	25	20	13	22
5 +	...	...	...	...	6	5	3	6
Unable to locate	...	...	...	...	11	13	9	2
No information available	...	...	...	...	1	1	2	—

SPEECH THERAPY.

Mrs. E. MacDonald, Senior Speech Therapist.

During this session there has been an innovation in staffing. For the first time, a part-time therapist has been employed. As there is a shortage of speech therapists, she is a welcome addition to the ranks.

There is an increasing tendency for speech therapists to employ mechanical aids in treatment. A Bell & Howell Language Master has been installed in Kelbourne School for use by the delayed speech group and the cerebral palsied. This is basically a tape-recorder which allows the child simultaneously to look at a picture, see its written name and hear it correctly articulated. There is additional space for him to record his own articulation in juxtaposition to the presented word, thus giving easy comparison. In this way he has the visual stimulus of the picture and written symbols to reinforce the auditory stimulus in the learning of a given word.

In the Summer of 1966 the National Conference of Speech Therapists was held at Jordanhill College of Education. A paper was presented by the Senior Speech Therapist, Miss Dorothy McKirdy, based on research carried out by the Glasgow therapists working in schools for mentally handicapped children. A test in the comprehension of spoken language was given to a number of children requiring speech therapy. The same test was administered to a number of children not requiring speech therapy, to provide a control group. The children were first made familiar with the vocabulary to be used and then were asked to carry out commands of graded complexity. I.Q. was taken into account and the ages of the children noted.

Results showed :—

- (a) That the I.Q. of the speech cases tended to be lower than those of the control group.
- (b) Speech cases obtained a significantly lower score in response to commands than did control group.
- (c) Cases in the control group tended to have a higher score than speech cases at a comparable age, although this effect was nullified by 8-10 years. It would appear, therefore, that non-speech cases have the ability to learn more quickly. However, once the speech cases are old enough to assimilate the vocabulary the difference in comprehension facility ceases to become a significant factor in test performance.
- (d) In general, good environment raised the score obtained.

The work of the speech therapists during the year is summarised as follows :—

	Advice only	Cases treated	No. of treatments	Home visits	School visits
Children attending—					
Schools for Physically Handicapped	—	44	780	19	22
Schools for Mentally Handicapped	46	414	5,970	26	297
Kelbourne School Cerebral Palsy Unit	—	20	874	—	All seen in school
Delayed speech group	—	23	2,000	—	All seen in school
Ordinary School	177	1,376	14,477	337	691
Pre-School	87	190	2,325	29	—
School for Deaf	—	74	1,410	—	All seen in school

IMMUNISATION CAMPAIGNS IN SCHOOLS.

DIPHTHERIA AND TETANUS

Two campaigns were undertaken during the calendar year (January to March and September to December), in schools to protect children against diphtheria and tetanus. In the first campaign diphtheria and tetanus toxoid injections were given mainly to children aged five and six, and booster doses of tetanus toxoid to children from nine to eleven years who had received tetanus immunisation in the previous year's campaign. In the second campaign, children aged five and six were

immunised for diphtheria and tetanus whilst a booster dose was given to all children who had received their initial tetanus toxoid injections previously.

Injectons given by school medical officers were :—

	Diphtheria and Tetanus			Tetanus only			Total Doses
	First	Second	Re-inforcing	First	Second	Re-inforcing	
First Campaign	5,548	4,969	10,332	150	145	9,800	30,944
Second Campaign	6,562	5,994	10,366	41	53	1,072	24,088

POLIOMYELITIS

A " drive " to protect children of five and six years of age against poliomyelitis was conducted in schools concurrently with the diphtheria/tetanus campaign from September to December. Three doses of oral vaccine were given with an interval of four weeks between each. A fourth dose was given to children in the same age-group who had been immunised previously.

Oral doses administered by school nurses were :—

First	Second	Third	Re-inforcing	Total Doses
2,242	1,826	1,691	15,360	21,119

PREVENTION OF TUBERCULOSIS.

B.C.G. VACCINATION

The annual campaign in schools was conducted from October to December, 1966, and the results are given in the section on tuberculosis.

MASS RADIOGRAPHY

The School Health Service continued to arrange with the Mass Radiography Centre, Elmbank Street, for the X-raying of pupils attending Glasgow schools.

Dr. T. J. R. Miller, Medical Director of the Mass Radiography Service, tells us that—

Pulmonary tuberculosis was less frequent in both groups, the incidence of active lesions being 0·2 per 1,000 below and 0·4 per 1,000 above the rates recorded in the primary and re-examination groups respectively in 1965.

Active lesions were found in two boys (1.45 per 1,000) and two girls (1.68 per 1,000) X-rayed for the first time and in one boy (0.82 per 1,000) attending for X-ray.

Eight pupils with inactive lesions were equally divided between the primary (1.57 per 1,000) and the re-examined (1.77 per 1,000) groups. One (0.39 per 1,000) previously diagnosed case occurred in pupils X-rayed for the first time and three (1.33 per 1,000) X-rayed in previous years.

Of the 618 pupils not mantoux tested, one girl had an active lesion and one boy had hilar adenitis.

SURVEY OF FURTHER EDUCATION COLLEGES

In November/December, 1966, the Mass Radiography Service, Elmbank Street, X-rayed 5,626 students (5,255 males and 371 females) attending five colleges for further education, including annexes. Eighty (76 males and 4 females) were recalled for large film. The results were as follows :—

	Males	Females
Active or probably active pulmonary tuberculosis	4	1
Inactive pulmonary tuberculosis	1	1
Known pulmonary tuberculosis	5	—
Bronchial thickening	2	—
	<hr/>	<hr/>
	12	2
	<hr/>	<hr/>

Despite a small increase compared with a year ago, the total incidence of pulmonary tuberculosis (2.1 per thousand) remained satisfactorily low.

Students with abnormalities of any significance were informed and reports of findings were sent to their doctors. Appointments to attend their area chest clinics would be sent to those requiring assessment and observation.

TEACHERS' SICK PAY REGULATIONS

During the year ended 31st December, 1966, teachers to the number of 2,272 (934 males and 1,338 females) were X-rayed by the Department.

The numbers recalled for large film (including reports from chest physicians) were 40 men and 42 women, the diagnosis being as shown :—

	Males	Females
Active pulmonary tuberculosis	—	—
Inactive pulmonary tuberculosis (including calcified or fibrotic conditions)	14	19
Inactive pulmonary tuberculosis (pleural thickening)	1	—
No apparent defect	18	18
Old thoracoplasty—remaining lung clear ...	1	—
Bone defects	2	2
Chronic bronchitis and emphysema	1	—
Bronchial carcinoma	1	—
Cardiac hypertrophy	1	1
Bronchiectasis (long-standing)	—	1
Fibrosis following mastectomy and radiation ...	—	1
Auricular fibrillation	1	—
	<hr/> 40	<hr/> 42

During the same year, 45 nursery assistants were examined.

RESIDENTIAL SCHOOLS.

The centres outwith the City are listed below along with the accommodation available for pupils. Periods of residence varied according to the needs of the individual child and averaged four weeks for the normal child, four to six weeks for convalescents and two weeks for nursery children.

(i) NORMAL

Achnamara, Lochgilphead ...	48 Protestant boys and girls (Secondary, 1st year).
Dalguise, near Dunkeld ...	48 Roman Catholic boys and girls (Primary V, VI and VII).
Galloway, Wigtown	112 Protestant boys and girls (Primary V, VI and VII).

(ii) CONVALESCENT

Agnes Patrick/Stevenson, Ascog	58 Roman Catholic boys and girls (8-15 years).
Caol Ruadh, Colintrave ...	36 Protestant boys (8-15 years).
Castle Toward, by Dunoon ...	100 Protestant boys and girls (8-15 years).
Craig, Kilmarnock	56 Roman Catholic boys (5-12 years).
Hillfoot, Bearsden	45 Protestant mentally handicapped children (8-14 years).
Lumsden, Maybole	29 Roman Catholic girls (5-12 years).
Seafield, Ardrrossan	68 Protestant boys (5-12 years).
South Park, Ascog	28 Protestant girls (5-15 years).
Fornethy, near Alyth	74 Protestant girls (5-12 years).

(iii) NURSERY

Southannan, Fairlie	36 Protestant and Roman Catholic boys and girls (2-5 years).
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ARRANGEMENTS FOR FEEDING AND CLOTHING OF CHILDREN.

These arrangements are under the administration of the School Welfare Section of the Education Department.

(a) ADMINISTRATION AND NATURE OF MEALS

On 31st December, 1966, there were 120 kitchens preparing meals for school children. In addition, one kitchen supplied Kosher meals to Jewish children. On an average day in October, 1966 (Monday, 24th October), the total number of dinners served was 83,658 of which 20,955 were supplied free.

Dinners only were supplied to pupils of ordinary schools and schools for handicapped children. In nursery schools dinners and teas were served, while a Health and Welfare day nursery received breakfasts, dinners and teas.

Choice of menu has been extended and is at present operating at 16 schools. The service is cafeteria type and the pupils have a choice of two or three main dishes, two vegetables and two or three sweets. This has proved successful both in primary and secondary schools and it is hoped to extend it to other schools. The success of this service depends to a large extent on the co-operation of the Head Teacher and his staff as good discipline in the dining-room is essential.

The meals were served in 404 dining-rooms, 377 of which were on school premises, the remainder being in church and other halls.

(b) NUMBER AND COST OF MEALS

The number of dinners prepared in kitchens during the year ended 31st December, 1966, was 17,467,364.

Weekly tickets were purchased by pupils requiring dinners in schools at the following prices :—

For 5 meals per week—4s. 9d. for the first child of a family, 4s. 4d. for the second and 3s. 11d. for the third and subsequent children ; equivalent prices for 6 dinners were 5s. 7d., 5s. 2d. and 4s. 9d. Remission rates for 3s. 11d., 3s., 2s. or 1s. (based on family income) were charged for a ticket valid for 6 dinners per week, the price being the same for each member of the family.

In schools for handicapped children the prices were 1s. 10d. and 2s. 1d. for 5 and 6 dinners respectively or at remission for 6 dinners of 2s. and 1s.

On Saturdays and holidays, meals were supplied to children entitled to free meals and to children who held tickets purchased at partial remission rates. In addition to this, during holidays only, meals were supplied to children holding purchased tickets at normal prices and whose parents were unable to make suitable arrangements to provide a midday meal.

(c) SPECIAL DIETS

The following table shows the numbers of children provided with special diets on the authority of the School Health Service.

Type of Diet	Primary Schools		Secondary Schools		Special Schools and Occupational Centres	
	Boys	Girls	Boys	Girls	Boys	Girls
Coeliac	15	21	1	1	4	4
Weight reducing	2	4	1	4	2	8
Non-greasy	—	—	—	2	—	—
Diabetic	5	2	7	3	1	1
Lawrence line	2	2	—	—	—	—
Phenylketonuria	—	—	—	—	3	1
Ulcer diet	—	—	—	1	—	—
Free from fish and eggs	—	—	—	1	—	—
Low residue	—	—	1	—	—	—
Low fat—high protein	—	1	—	—	—	1
Starch free	—	—	—	—	1	—
No egg or tomato	—	—	—	—	1	—
	24	30	10	12	12	15
Totals	54		22		27	

(d) FOOTWEAR AND CLOTHING

During the year 2,957 children were provided with footwear and clothing as compared with 2,858 during the previous twelve months. The undertaking given by the National Assistance Board to accept responsibility for the clothing needs of children of their dependents continued satisfactorily.

(e) MILK SUPPLIED TO SCHOOL CHILDREN

All milk supplied to schools under the Milk in Schools Scheme was pasteurised.

The total number of milk rations during the year was 33,895,921. The most recent census figures showed that 96·40 per cent. of the children present in school on a particular day in January, 1966, were taking school milk compared with 95·30 per cent. in January, 1965, and 96·19 per cent. in May, 1964.

PHYSICAL EDUCATION, 1965-66.

Mr. W. Tinto, Adviser in Physical Education.

In common with other specialist subjects, the Department of Physical Education has had to contend with shortage of staff and the problem of accommodating reduced staff to the increasing requirements in secondary schools is escalating to unmanageable proportions. Fourteen uncertificated women teachers are assisting to the best of their experience and ability by taking classes in swimming, dancing and games which form one aspect of the subject but this help only approximates to the assistance which can be given by fully qualified and certificated personnel.

The shortage of specialised staff is detrimental to the work in primary schools where visits and demonstration, by specialised teachers, at one time an excellent feature of the Glasgow Physical Education administration, has had to be discontinued. This deficiency has been partly offset by the running after school hours by the advisory staff of courses for teachers of primary schools—courses, for example, on netball coaching, on swimming and on other games, all of which have been most successful. Unfortunately many interested primary teachers find it inconvenient to attend courses at this time.

In secondary schools the year has been marked by an increase in the facilities for physical education. For example, two new games halls have been opened at Cadder and Castlemilk, two new swimming pools have been opened, one at Adelphi and one at Craigbank and Lochend playing field has now been completed. All of these, with the opening of three new secondary schools form excellent supplements to existing accommodation.

The year has been marked by a series of demonstrations and courses run in conjunction with the many recreational activities which are forming an important aspect of physical education. Demonstrations on golf, tennis and fishing have taken place in the games halls before audiences of 500 pupils and successful courses, after school between 4.30 and 6 p.m., on fishing, fencing and athletics, have all been enthusiastically attended by many secondary school teachers. It is interesting to note that many of the teachers attending are other than teachers of physical education. The interest in recreational activities is reflected in the efforts of Head Teachers to modify timetables in order to include such activities in their programme and the Education Committee, in so far as has been possible, with restrictions in spending,

continues to keep abreast of modern educational thought and practice by supplementing, where possible, the efforts of schools in the matter of equipment.

The interest in Health Education as a subject for study for the Ordinary and Higher Leaving Certificate, shows a marked increase in certain schools and the subject of Physical Education now includes in its provision, a health education classroom.

DENTAL INSPECTION AND TREATMENT.

Mr. M. L. H. Davies, Chief Dental Officer.

Dental Auxiliaries. The dental auxiliary scheme was introduced for a five-year experimental period. This period is now over and the General Dental Council have recently produced their report on the matter. In general, their findings show that the auxiliaries have a useful and worthwhile contribution to make in helping to relieve the present shortage of dental surgeons. In Glasgow we have had four dental auxiliaries on our staff for nearly four years and they have proved themselves to be very satisfactory, both by their high standard of work and by their capable and sympathetic handling of children. I consider, however, that parents should be made more aware of the fact that their children may be treated by auxiliaries and not left to assume that dental surgeons are operating on them. To this end, it is proposed to initiate the use of small name plates on surgery doors clearly indicating the name and designation of the operator. One disadvantage in employing dental auxiliaries is that, as they require to be under direct supervision of a dental officer when they carry out the minor dental treatment they are allowed to do, this necessitates the use of surgeries in pairs. A second disadvantage is that, in the absence of the dental officer, they must cease all treatment other than cleaning and polishing teeth.

Refresher Course. During the year all our dental officers attended a short refresher course at Glasgow Dental Hospital. The fact that the course was run exclusively for our staff enabled us to select the subjects being dealt with and as a result it proved to be unusually beneficial. One direct result of the course was that the number of root treatments carried out was increased by over 300 per cent. over the previous year.

Routine Dental Inspections. A new method of carrying out dental inspections has now been put into practice. This method avoids involving school staff in clerical work.

Orthodontics. As the second stage of the expansion of this side of our service, orthodontic treatment has now been made available in four additional clinics; children attending these clinics will still have the benefit of our orthodontic specialists' advice when necessary, but will be spared the inconvenience of frequent travelling to a central clinic.

Emergency Cases. For the first time separate figures are available for the number of children attending clinics specially for the relief of "toothache." The over-all average for all clinics is surprisingly small, the number being 0.55 per session.

Expansion of Dental Service. In order to be able to offer a dental service in Easterhouse and Castlemilk areas, permission was obtained to increase our establishment by three dental officers, making a total of 22. As no suitable accommodation is available two of these dental officers will operate in self-propelled caravan-type surgeries, travelling round from school to school. The third dental officer will work in Wellhouse Crescent Clinic, Easterhouse.

To cope properly with our share of the dental treatment of Glasgow school children, a further 36 dental officers would be required. In our City we have at present an establishment which gives (including dental auxiliaries) the equivalent of one dental officer to 7,300 children. The Scottish average is one dental officer to 3,000. It is estimated that last year there were 85,000 children in Glasgow who required dental treatment, but did not receive it either from our own service or from general dental practitioners. Further expansion of the school dental service will obviously be required and full use will also have to be made of all available preventive measures, especially fluoridation which, in time, could effectively and safely cut dental decay by 50 per cent. and could ultimately bring the problem to manageable proportions.

Dental Health.—During the year 20,000 tooth-cleaning packs were sent to schools for distribution to new school entrants. These packs contained a Happy Smile Club card, toothpaste, toothbrush, bathroom instruction card and a letter from our Department. They were backed by talks from a dental auxiliary or from class teachers. A survey of 812 parents taken three months after distribution showed that 47 per cent. considered that the pack had a good effect on their child's dental habits, 30 per cent. considered it had a moderate effect and 23 per cent. considered it had no effect, or had only resulted in a temporary improvement. Dental health education requires to be pushed repeatedly to be effective as it is necessary not only to teach the children how to achieve good dental health, but it is also necessary to educate their

parents whose bad eating habits they copy. Pleasure-giving but bad dietary habits, the main cause of dental decay, will not be easily changed, but our efforts to correct them are more than justified by the benefits which could be gained.

Productivity. Our figures for the year again show an improvement in work done per treatment session, the increase in fillings over the previous year being more than 9 per cent. In spite of this increase a good standard of work has been maintained.

The National Health Service Act was amended during the year to allow expectant and nursing mothers to receive free treatment from general dental practitioners as well as in local authority clinics. Since then, in common with other local authorities, we have had a steadily decreasing number of mothers applying for treatment in our clinics.

GOITRE SURVEY.

Dr. T. S. Wilson.

During the autumn session, 1966, a goitre survey was conducted by Dr. W. R. Greig (Glasgow Royal Infirmary) and associates, in four primary and four secondary schools in Glasgow. Similar surveys were made in Dumfries and Nithsdale. The comparative figures for the three areas are now given :—

		Glasgow		Dumfries		Nithsdale	
		Female	Male	Female	Male	Female	Male
Aged 5-10 years	No.	691	635	249	272	145	137
	%	13.0	12.4	15.7	13.2	28.9	29.9
Aged 11-15 years	No.	1,740	1,682	250	197	101	103
	%	15.6	11.4	21.2	11.7	28.7	31.1

In both Glasgow and Dumfries the goitre rate was influenced by sex and age, high rates being found in girls aged 11-15 years. In contrast, in Nithsdale, in both the younger (5-10 years) and in the older children (11-15 years), boys and girls alike—the goitre rate was consistently high, varying only between 28.7 per cent. and 31.1 per cent.

The investigators concluded that whereas in Glasgow and Dumfries the chief cause of goitre is an intrinsic female endocrine factor, in Nithsdale it is mainly environmental. The environmental factors are probably an iodine-deficiency state or substance in the local vegetation, water and milk which cause the goitre.

This survey was fully reported in the *Lancet*, 18.3.67. Pages 590-592—"Simple Goitre in Glasgow and Dumfries School Children"—W. R. Greig and associates.

SANITARY CONDITIONS OF SCHOOLS.

In accordance with the provisions of the Education (Scotland) Act, 1962, school medical officers visit the various schools (including residential and nursery schools) in the course of the year and any defects found are reported to the appropriate Department for the necessary action to be taken. On the occasion of each visit to the school the doctor also takes the opportunity of interviewing the Head Teacher and class teachers for the purpose of discussing with them the health and well-being of their pupils and giving advice in particular cases.

During the year, 196 visits were paid to 190 schools for the purpose of general inspection. In the same period 60 visits were made to 57 kitchens and dining halls where meals for school children were prepared and served.

SOME INTERESTING POINTS ABOUT THE OLDER GLASGOW SCHOOLS.

Dr. Logan, School Medical Officer.

A few schools remain in Glasgow from the days before compulsory education; one of the oldest is William Street Nursery School, opened as St. Matthew's Free Church School in 1844. The oldest used as a primary school is John Street, once Bridgeton Free Church School (1851). Both are plain, unpretentious buildings. Larger and more impressive are: the old Normal School (now Dundas Vale Nursery School) which, erected in 1836, appears to be the oldest still used for educational purposes; St. Kentigern's, Duke Street, opened about 1860 as Alexander's School; and the "Academia Parochialis de Poloc, Culturae Christianae Dedicata" in 1861, as an inscription tells us—now an annexe of Maxwell School, Pollokshaws. This last is the Romanesque style with an attractive clock tower, making quite a striking group with the adjoining church and burgh hall. The other two also have clock towers; the one at Dundas Vale seeming to be alone in having an operative clock. The centre block of the High School, originally Glasgow Academy, dates from 1845, but has been much altered.

In the first fifteen years of the School Boards, from 1874, two-storey yellow stone buildings were usual. The best designs had to be learned from experience and some, which were very old-fashioned even then, were erected—real “schoolhouses” with massive gable-ends. Rockvilla School has the air of a villa, with bow windows (and spiral stairs). The janitor’s house has crow-stepped gables. (These houses would be an interesting study, incidentally, for someone. Some adjoin their school, others are quite separate. Some, like Mount Florida’s, are underneath and now, at Possilpark, we have an example of “penthouse accommodation” on the roof of the new school.)

Better examples broke away from the “schoolhouse” with its dark, narrow stairs and passages, e.g. Camlachie School (1878) has broad, adjoining central staircases, well-lit from above. A three-storeyed building, with the rooms round a central well, became the common pattern. Petershill School is typical, with its framework of stairs filling the well-space, an arrangement almost incomprehensible to strangers. From the 1890’s on, most Board schools had the stairs at the ends, a great improvement, with galleries connecting the rooms round the well; 1895 to 1914 saw the familiar excellent, red sandstone buildings put up, perhaps the classic era of school design. Staffrooms, cloakrooms and offices were often on mezzanines opening on to the stairs in the largest schools, e.g. Quarry Brae, like the towers of a castle. The last development of these schools was the extension of the top floor over the well to form another assembly space, as at Cuthbertson and Bluevale. This “golden age” ended in 1914; its last products were Onslow and Calder Street.

The enterprising Cathcart Board opened Battlefield Infants’ School (now burnt, alas) and Holmlea in 1908, with gymnasia (physically separated) and an individual classroom with sink to each class, each opening also to the corridor; the windows had those splendid geared mechanisms, operated by rotating a handle which cost the Board £2 6s. 11d. each. A doctor’s room, which doubled in Holmlea as a music room, was provided. The Board’s Chairman was a Doctor William Watson, and the architect was Alexander Balfour. Latterly this Board chose its architects by open competition, the (anonymous) entries being judged by an “Architectural Assessor” and an “Educational Assessor” (a headmaster) sitting together.

The Govan Parish Board had eight schools with swimming pools. The oldest, Bellahouston Academy (now Govan High School), privately built and opened in 1876, had also gymnasia for boys and for girls. Financial difficulties led to its sale to the Board in 1885. Thereafter

ponds were built, either in an out-building or in the basement, of seven more. Since two of these were converted to gymnasia in the '30s, only five remain : in Lorne Street, Strathbungo, Greenfield, Balshagray and Church Street. After 1909 not another was erected for more than half a century.

The Roman Catholic schools built from 1890 are interesting for the ingenious use of restricted ground space. Several combined " Church-Schools " were built—St. Luke's, Ballater Street is, I believe, the only remaining example with the original arrangement. Here, the church occupies the ground floor and the school the three above. Roof playgrounds were numerous at one time, the walls being extended about five feet above roof level like " ramparts." St. Mary's, Calton, and Our Lady and St. Margaret's, Kinning Park, are the only remaining ones I know. The last-named is remarkable, as it has also an interior playground occupying the second floor. Other examples of ingenious saving of space are the location under the school of play-sheds and cloakrooms (as at Albert Road). Building up was resorted to rarely ; Hillhead Primary School (five storeys) is still, I believe, the highest school building in the City.

Various artistic embellishments are to be seen—a few examples are the statues on the High School facade (including, I think, Homer and Aristotle) ; the medallions carved on Abbotsford include the head of the National Bard as well as the owner of the eponymous estate. Quarry Brae School has small panels of curved, stained glass in the vestibules, and in the hall a large number of coloured tiles, alternating lions and dragons—I regret to see that one lion has lately been drilled through by an electrician. Colston School has very fine Corinthian pillars in its hall (Maryhill Board, 1909).

It is well known that Scotland Street School is by the famous Charles Rennie Mackintosh. While pleasing in external appearance and in details, such as the ironwork indoors, from a practical standpoint the only exceptional feature, perhaps, is that each cloakroom has separate exits and entrances. This is not the only school with a " charmingly diminutive " entrance for infants.

SURVEY—HOUSING CONDITIONS OF GLASGOW SCHOOL CHILDREN IN THE YEAR 1966.

It has been the practice, at varying intervals since the year 1924, to incorporate in the Annual Report a survey of the housing conditions

of the children seen at routine medical inspection during the school year selected, the size of house and the total number of inmates being noted, such information providing the basis for demonstrating a relationship between the health of the school child and the housing conditions.

In 1956 the scope of enquiry was extended to include for each pupil the type of family (tenant, lodger, etc.) number over and under 10 years and the actual accommodation used.

The statistical matter has been arranged in the following pages to show comparison, where possible, with similar data obtained in previous surveys (including information from a report by Sir Leslie Mackenzie in 1906). Some of the tables employed before have, therefore, been retained but others have been discontinued and new ones created to present the additional information. The figures apply only to the scholars examined and not to housing in the City as a whole. A comparison between School and City Assessor's return is given here.

			No. of Occupied Houses in City (per City Assessor's Return)		No. of Houses in School Children Survey	
1 apartment	...	...	25,121	(7.9%)	520	(1.7%)
2 apartments	...	...	84,855	(26.8%)	5,517	(18.4%)
3 apartments	...	...	118,818	(37.4%)	10,978	(36.5%)
4 apartments	...	...	64,215	(20.2%)	9,149	(30.4%)
5 + apartments	...	...	24,706	(7.7%)	3,916	(13.0%)
			317,715	100.0	30,080	100.0

Where any discrepancies are observed between the comparable numbers of children in this Appendix and in an earlier part of the Report, and between the different Tables in the Appendix itself, these are due to the fact that the information for each child was not always complete.

Table A.1. The number of children examined was not necessarily equalled by the number of houses because children in the same household might, in a few instances, have been examined during the period in the same age-group (twins) or other age-groups (brothers and sisters of different ages). Nine-year-old children are not included, as the routine medical inspection of this age-group was discontinued after the

1963 school year. The information given in this Table forms the basis for analysis of Tables A.2 and A.3.

Table A.2. The movement of the population from the smaller to the larger houses is shown. Most consistent improvements were in respect of people living in two-apartment and four-apartment houses ; in the former, the percentage of 65.9 in 1912 improved to 18.3 in 1966, whilst in the latter, the improvement in the same period was from 3.6 per cent. to 30.4 per cent. Another notable feature was the smaller proportion of one-apartment houses which decreased from 11.3 per cent. in 1912 to 1.7 per cent. in 1966.

Table A.3. The overall average number of inmates per house was increased—the highest since the 1936 survey. Improvements were noted for children living in one-apartment and two-apartment houses.

Table A.4. It will be noted that, in general, the average number of inmates was greatest in houses occupied by the “ Lodger ” type of family, except in one-apartment houses where the average was greatest in the “ Landlord ” type of occupancy, and in four-apartment houses where the “ Tenant ” type was the greatest.

Table B.1. The consistent increase in the average measurements with each additional apartment is notable—the exceptions being limited to the children in four-apartment houses where a probable explanation is that there was an improvement but it was obscured by reason of the large numbers of children moving from the smaller houses. The general trend of increase in average measurements from year to year is less marked recently.

Table B.2. The number of inmates per house is shown in the Table as the equivalent in adults ; i.e., each person aged 10 years and over equals one and each under 10 years equals a half. Perusal of the statistics shows that the general tendency, with some exceptions, was for the average measurements of 5-year-old boys to fall as the number of inmates increased and to rise as the number of apartments increased.

Table B.3. The average measurements of “ ordinary ” school children in two-apartment houses are shown in the Table to decrease as the number of inmates increase.

Table C.1. The correlation of the child's medical classification with the size of house is demonstrated clearly in this Table. With each increase in the number of apartments, the children in these houses tended to have decreased percentages of the "temporary" and less remediable defects.

Table C.2. The standards of occupancy for assessment of overcrowding adopted for the purposes of this Table and Table B.2 were based on the Housing Acts and were as follows :—Not overcrowded : one-apartment, 2 adults ; two-apartments, 3 adults ; three-apartments, 5 adults ; four-apartments, $7\frac{1}{2}$ adults ; five-apartments, 10 adults. Children under 10 years of age were each taken as half-an-adult, two of such children being regarded as the equivalent of one adult.

Medical classification and the degree of "overcrowding" were shown to be correlated in each of the types of occupancy. That is, each increase in overcrowded home conditions was accompanied by increased incidence of the less remediable types of ailment in the children drawn from such homes. Of the few exceptions to the rule most were found in the "much overcrowded" category and mainly under the "landlord" type of occupancy.

SUMMARY.

The housing conditions of Glasgow school children over the past 55 years have shown considerable improvement as evidenced by the progressive movement of families from smaller to larger houses (Table A.2) ; the rise of the four-apartment house and the fall of the "single-end" were notable. The average number of inmates per house was increased (Table A.3). An unsatisfactory feature, however, was that the "Lodger" type of occupancy (i.e., the sub-let accommodation) provided the largest number of inmates, on an average (Table A.4).

Average heights and weights of children from all sizes of house have shown consistent increase since 1906 (Table B.1) and close connection between the average measurements of the children and the conditions in which they lived are clearly indicated (Tables B.2 and B.3). Medical classification of the children according to severity of defect is seen to be linked with the size of the house (Table C.1) and the degree of overcrowding (Table C.2).

SURVEY—Table A.1—SUMMARY OF HOUSING INFORMATION PROVIDED BY PARENTS OF CHILDREN OF 5 AND 13 YEARS OF AGE AT THE TIME OF ROUTINE MEDICAL INSPECTION IN 1966.

A =No. of Children Examined. B =No. of Inmates of all ages in the Houses.														
Size of House		One Apartment		Two Apartment		Three Apartments		Four Apartments		Five or more Apartments		Totals		
		A	B	A	B	A	B	A	B	A	B	A	B	
School or Class	Age													
	Non-Transferred													
	5 years ...	262	1,206	2,612	12,797	3,804	19,540	2,698	16,681	1,141	6,796	10,517	57,020	
Transferred ...	13 years ...	58	240	867	4,231	3,012	14,650	2,905	16,593	1,517	8,524	8,359	44,238	
	Total ...	320	1,446	3,479	17,028	6,816	34,190	5,603	33,274	2,658	15,328	18,876	101,258	
	5 years ...	172	822	1,540	7,897	2,487	13,803	1,717	11,916	544	4,135	6,460	38,573	
For Physically Handicapped	13 years ...	26	122	440	2,317	1,543	8,374	1,718	11,297	682	4,890	4,409	27,000	
	Total ...	198	944	1,980	10,214	4,030	22,177	3,435	23,213	1,226	9,025	10,869	65,573	
	5 years ...	1	6	6	31	12	59	7	38	3	20	29	154	
For Mentally Handicapped	13 years ...	—	—	3	17	7	40	18	113	1	10	29	180	
	Total ...	1	6	9	48	19	99	25	151	4	30	58	334	
	5 years ...	—	—	9	43	22	120	12	75	—	—	43	238	
All Schools and Classes ...	13 years ...	1	5	40	226	91	541	74	495	28	227	234	1,494	
	Total ...	1	5	49	269	113	661	86	570	28	227	277	1,732	
	5 years ...	435	2,034	4,167	20,768	6,325	33,522	4,434	28,710	1,688	10,951	17,049	95,985	
...	13 years ...	85	367	1,350	6,791	4,653	23,605	4,715	28,498	2,228	13,651	13,031	72,912	
	Total ...	520	2,401	5,517	27,559	10,978	57,127	9,149	57,208	3,916	24,602	30,080	168,897	

For percentage of children represented by the above figures and average number of inmates per house, see Tables A2 and A8.

SURVEY.—Table A.2.—AN ANALYSIS OF HOUSING INFORMATION PROVIDED BY PARENTS AT THE TIME OF ROUTINE MEDICAL INSPECTION IN EACH OF THE YEARS, 1912, 1924, 1931, 1936, 1944, 1951, 1956, 1961 AND 1966.

PERCENTAGES OF CHILDREN IN THE VARIOUS GROUPS DRAWN FROM HOUSES OF THE NUMBER OF APARTMENTS SHOWN.

Size of House.	School or Class.	Year	One Apartment.				Two Apartments.				Three Apartments.				Four Apartments.				Five (or more) Apts.			
			5 yrs.	9 yrs.	13 yrs.	Total	5 yrs.	9 yrs.	13 yrs.	Total	5 yrs.	9 yrs.	13 yrs.	Total	5 yrs.	9 yrs.	13 yrs.	Total	5 yrs.	9 yrs.	13 yrs.	Total
Non-Transferred		1912	Not available	Not available	Not available	9-7	Not available	Not available	Not available	64-9	Not available	Not available	Not available	18-7	Not available	Not available	Not available	4-1	Not available	Not available	Not available	2-6
		1924	17-5	14-1	9-4	15-3	58-9	61-9	67-2	61-0	16-3	16-5	17-1	16-5	3-9	4-5	3-9	4-1	3-5	2-9	2-5	3-2
		1931	15-4	10-2	7-1	11-4	52-0	51-2	50-8	51-4	21-7	25-7	27-6	24-6	7-3	8-3	9-8	8-2	3-6	4-7	4-3	4-3
		1936	15-2	8-6	5-2	9-8	46-7	46-5	38-8	45-7	26-2	30-0	33-5	29-8	8-9	11-0	12-7	10-8	3-0	3-9	4-8	3-9
		1944	14-5	10-5	6-3	10-8	44-2	43-1	38-7	42-2	25-9	28-3	31-9	28-4	11-4	13-9	17-0	13-8	4-1	4-2	6-1	4-7
		1951	12-4	8-0	4-8	8-7	37-9	38-0	35-4	37-1	26-5	27-8	28-3	27-5	17-1	19-4	23-8	20-0	6-0	6-7	7-7	6-8
		1956	10-1	4-2	2-7	5-9	35-2	27-6	23-5	29-2	26-8	32-3	32-4	30-3	20-7	27-1	31-1	25-9	7-2	8-8	10-3	8-7
Transferred		1961	5-3	2-6	1-0	3-0	31-3	21-7	15-5	22-9	37-4	35-1	37-4	35-4	27-2	27-8	32-0	26-9	8-7	12-8	13-9	11-7
		1966	2-5	—	0-7	1-7	24-8	—	10-4	18-4	36-2	—	36-0	36-1	25-7	—	34-8	29-7	10-8	—	18-1	14-1
		1912	Not available	Not available	Not available	16-9	Not available	Not available	Not available	69-6	Not available	Not available	Not available	10-9	Not available	Not available	Not available	1-8	Not available	Not available	Not available	0-5
		1924	27-0	20-1	15-5	22-0	61-6	67-5	71-1	65-8	8-4	9-8	11-4	9-6	2-0	1-7	1-6	1-8	1-0	0-9	0-4	0-4
		1931	22-6	18-1	12-1	18-3	59-3	60-1	60-6	59-9	14-2	16-6	20-3	16-6	2-8	3-4	5-0	3-6	1-1	1-7	2-0	1-5
		1936	19-2	13-3	8-5	13-9	50-2	53-7	51-9	51-9	22-8	27-9	28-4	26-4	6-4	6-8	8-9	7-3	1-5	1-5	2-3	1-7
		1944	19-7	12-3	7-4	14-1	47-2	45-1	42-2	45-2	22-3	27-9	31-1	25-4	8-3	11-3	15-3	11-1	2-4	3-3	3-9	3-1
For Physically Handicapped		1951	17-3	10-3	7-4	11-9	42-0	41-2	36-8	40-0	21-6	25-5	25-7	24-1	15-3	17-2	23-3	18-5	3-9	5-8	6-8	5-4
		1956	12-1	6-1	3-9	7-9	36-9	30-5	27-3	32-1	25-9	28-7	28-6	27-6	19-2	26-4	30-9	24-8	5-9	8-3	9-3	7-6
		1961	7-3	2-7	1-5	4-2	32-4	24-5	16-3	25-2	32-2	32-3	35-3	33-2	21-8	29-9	35-7	28-4	6-3	10-7	11-2	9-1
		1966	2-7	—	0-6	1-8	23-8	—	10-0	18-2	38-5	—	35-0	37-1	26-6	—	39-0	31-6	8-4	—	15-5	11-3
		1912	Not available	Not available	Not available	12-5	Not available	Not available	Not available	71-7	Not available	Not available	Not available	15-1	Not available	Not available	Not available	0-7	—	—	—	—
		1924	24-3	22-1	15-2	20-7	67-9	66-2	71-4	68-3	7-9	9-2	12-1	9-7	—	1-9	1-0	1-0	—	0-6	0-3	0-3
		1931	18-1	17-4	11-1	15-9	60-6	57-9	62-6	59-5	18-9	19-4	20-5	19-6	2-4	4-2	4-7	4-0	—	1-2	1-1	0-9
For Mentally Handicapped		1936	20-6	15-2	11-4	14-6	45-1	50-3	50-7	49-8	24-5	26-7	29-1	27-2	8-8	7-1	7-5	7-4	1-0	0-7	1-3	0-9
		1944	35-0	11-7	14-4	16-4	37-5	55-3	44-8	47-3	22-5	23-3	22-4	22-8	5-0	7-8	12-8	9-7	—	1-9	5-6	3-4
		1951	27-3	15-2	12-8	15-4	45-5	43-7	30-8	38-6	9-1	18-7	23-4	19-7	18-2	17-0	26-6	21-0	—	5-4	6-4	5-3
		1956	20-0	15-6	5-4	12-9	40-0	34-4	33-9	35-1	16-0	23-3	26-8	23-4	16-0	23-3	32-1	25-1	8-0	3-4	1-8	3-5
		1961	13-3	6-7	—	6-8	26-7	13-3	14-3	18-2	40-0	20-0	21-4	27-3	13-3	26-7	28-6	22-7	6-7	33-3	35-7	25-0
		1966	3-4	—	—	1-7	20-7	—	10-3	15-5	41-4	—	24-1	32-8	24-1	—	62-1	43-1	10-3	—	3-4	6-9
		1912	Not available	Not available	Not available	19-1	Not available	Not available	Not available	63-8	Not available	Not available	Not available	14-9	Not available	Not available	Not available	2-1	—	—	—	—
		1924	27-3	18-5	12-2	22-2	—	63-4	66-0	65-1	—	8-1	13-0	10-8	—	1-2	1-7	1-4	—	—	0-8	0-5
All Schools and Classes		1931	11-1	20-5	14-0	17-4	88-9	63-2	61-7	63-1	—	13-2	19-7	15-8	—	2-3	2-1	2-2	—	0-9	1-1	1-0
		1936	—	22-5	15-4	17-4	—	41-6	51-3	47-4	—	28-7	24-8	26-4	—	6-2	8-9	7-8	—	1-0	1-0	1-0
		1944	—	18-0	12-9	14-6	—	47-0	42-3	43-7	—	26-0	29-4	28-1	100-0	7-0	13-4	11-5	—	2-0	2-1	2-0
		1951	22-2	17-1	12-6	14-2	—	46-9	38-6	40-6	55-6	18-3	21-0	20-8	11-1	12-8	20-2	17-7	11-1	4-9	7-6	6-8
		1956	25-0	9-3	6-4	8-2	18-8	37-4	34-2	35-2	18-8	25-6	28-5	26-9	31-3	23-2	25-8	24-8	6-3	4-5	5-1	4-9
		1961	3-8	4-8	5-4	5-1	30-8	28-6	21-7	24-6	38-5	31-0	34-9	33-6	27-9	24-3	30-1	27-6	3-8	11-4	7-8	9-0
		1966	—	—	0-4	0-4	20-9	—	17-1	17-7	51-2	—	38-9	40-8	23-1	—	31-6	31-0	—	—	12-0	10-1
		1912	Not available	Not available	Not available	11-3	Not available	Not available	Not available	65-9	Not available	Not available	Not available	17-3	Not available	Not available	Not available	3-6	Not available	Not available	Not available	1-9
		1924	19-8	15-9	12-8	17-2	59-6	63-3	68-6	62-4	14-3	14-6	14-3	14-5	3-4	3-7	2-8	3-4	2-9	2-4	1-5	2-5
		1931	17-4	12-4	8-6	13-3	54-1	53-7	53-8	53-9	19-6	23-2	25-3	22-4	6-0	6-9	8-3	6-9	2-9	3-8	3-9	3-5
		1936	16-3	10-1	6-4	11-1	47-7	48-4	46-2	47-5	25-2	28-6	31-9	28-5	8-2	9-7	11-5	9-8	2-6	3-1	4-0	3-2
		1944	16-1	11-1	6-8	11-8	45-1	43-9	39-7	43-1	24-8	28-1	31-5	27-8	10-4	13-0	16-5	13-0	3-6	3-9	5-5	4-2
		1951	13-8	8-9	5-8	9-7	39-1	39-1	35-9	38-0	25-1	26-9	27-3	26-4	16-6	18-6	23-5	19-5	5-4	6-4	7-4	6-4
		1956	10-8	4-9	3-3	6-6	35-8	28-7	25-0	30-2	26-5	31-1	31-3	29-4	20-1	26-8	30-6	25-6	6-8	8-5	9-8	8-2
		1961	6-0	2-7	1-3	3-4	31-7	22-7	15-8	23-7	33-0	34-1	36-9	34-7	21-4	28-4	33-0	27-4	7-8	12-1	13-0	10-8
		1966	2-6	—	0-7	1-7	24-4	—	10-4	18-3	37-1	—	35-7	36-5	26-0	—	36-2	30-4	9-9	—	17-1	13-0

Not.—Routine medical inspection of 9-year-olds discontinued after 1963.

SURVEY.—Table A.3.—ANALYSIS OF HOUSING INFORMATION PROVIDED BY PARENTS IN THE YEARS 1912, 1924, 1931, 1936, 1944, 1951, 1956, 1961 AND 1966.

AVERAGE NUMBER OF INMATES OF ALL AGES PER HOUSE.

Size of House.		One Apartment.				Two Apartments.				Three Apartments.				Four Apartments.				Five (or more) Apts.				Totals.			
School or Class.	Year	5 yrs.	9 yrs.	13 yrs.	Total	5 yrs.	9 yrs.	13 yrs.	Total	5 yrs.	9 yrs.	13 yrs.	Total	5 yrs.	9 yrs.	13 yrs.	Total	5 yrs.	9 yrs.	13 yrs.	Total				
Non-Transferred	1912	Not available	Not available	Not available	4.1	Not available	Not available	Not available	6.2	Not available	Not available	Not available	6.9	Not available	Not available	Not available	6.4	Not available	Not available	Not available	6.5				
	1924	5.0	4.8	5.2	4.9	5.8	6.0	6.8	5.9	5.8	6.0	6.5	6.0	6.2	6.4	6.9	6.4	5.6	5.8	6.6	6.1				
	1931	5.0	5.2	5.0	5.1	5.5	5.6	5.7	5.6	5.7	5.8	5.9	5.8	5.7	5.9	6.3	6.0	5.8	5.7	5.8	5.8				
	1936	4.7	5.0	4.7	4.8	5.3	5.5	5.5	5.5	5.5	5.6	5.7	5.6	5.8	6.1	6.0	5.8	5.3	5.6	5.6	5.5				
	1944	4.7	4.8	4.7	4.6	4.8	5.1	5.0	5.0	5.0	5.2	5.4	5.2	5.2	5.6	5.9	5.8	5.0	5.3	5.2	5.2				
	1951	4.7	4.9	5.0	4.8	4.9	5.0	5.0	4.8	4.8	4.9	5.2	4.7	4.8	5.8	6.0	5.8	5.9	5.6	5.3	5.3				
	1956	4.8	4.9	4.7	4.8	4.9	4.9	4.9	4.8	4.9	4.9	4.7	4.7	4.5	5.8	5.6	5.6	5.6	5.2	5.3	5.3				
1961	4.8	5.1	4.4	4.8	4.9	5.1	4.9	4.9	4.9	5.0	4.2	4.7	4.7	6.0	5.8	5.7	5.7	5.1	5.1	5.1	5.1				
1966	4.6	—	4.1	4.5	4.9	4.9	—	—	5.0	5.1	—	4.9	5.0	6.2	5.8	5.4	5.6	5.3	5.1	5.1	5.4				
Transferred	1912	Not available	Not available	Not available	4.9	Not available	Not available	Not available	6.4	Not available	Not available	Not available	7.5	Not available	Not available	Not available	8.0	Not available	Not available	Not available	8.0				
	1924	5.3	5.5	5.4	5.4	5.9	6.4	6.4	6.4	6.4	7.1	7.1	6.8	7.5	7.1	7.4	7.3	6.1	6.3	6.3	6.3				
	1931	5.4	5.5	5.3	5.4	6.1	6.3	6.2	6.2	6.2	6.9	6.6	6.6	7.0	7.3	7.2	7.2	6.8	6.3	6.3	6.2				
	1936	5.1	5.2	4.9	5.1	6.0	6.2	6.1	6.1	6.1	6.5	6.6	6.6	7.6	7.6	7.2	7.5	7.0	6.1	6.3	6.2				
	1944	4.8	5.2	5.1	4.9	5.4	5.1	5.7	5.6	5.6	6.1	6.8	6.2	7.3	7.1	6.9	7.1	8.1	6.1	6.0	5.9				
	1951	5.1	5.3	5.3	5.2	5.6	5.8	5.7	5.7	5.7	6.1	6.8	6.0	6.1	7.1	6.8	6.9	7.8	6.0	6.2	6.1				
	1956	5.1	5.3	5.6	5.2	5.5	5.6	5.5	5.5	5.6	5.7	5.6	5.5	6.9	6.6	6.6	6.6	7.6	6.0	6.0	5.9				
1961	5.1	5.4	4.6	5.1	5.4	5.7	5.2	5.4	5.4	5.5	5.5	5.4	5.5	6.9	6.9	6.4	7.4	5.9	6.2	5.9					
1966	4.8	—	4.7	4.8	5.1	5.1	—	3.3	5.2	5.6	—	5.7	5.5	6.9	7.2	6.6	6.7	6.0	5.9	6.2	6.0				
For Physically Handicapped	1912	Not available	Not available	Not available	5.5	Not available	Not available	Not available	6.8	Not available	Not available	Not available	7.8	Not available	Not available	Not available	—	Not available	Not available	Not available	—				
	1924	6.4	5.4	4.8	5.6	7.0	7.1	6.5	6.8	8.0	7.4	7.6	7.6	—	6.2	7.0	6.5	7.0	6.7	6.2	6.8				
	1931	5.0	5.1	5.0	5.1	6.6	6.2	6.0	6.2	7.8	6.7	6.0	6.7	8.0	5.7	6.9	6.3	6.6	6.1	5.9	6.1				
	1936	5.2	5.3	5.2	5.2	6.0	6.1	5.9	6.0	6.6	6.7	6.2	6.5	8.1	6.8	7.1	7.1	8.0	6.2	6.1	6.1				
	1944	4.2	4.7	4.4	4.7	5.8	5.5	6.2	5.8	5.4	6.3	6.4	6.4	5.5	7.1	6.0	6.3	8.3	5.9	6.1	5.9				
	1951	5.3	5.6	6.1	5.7	6.0	5.4	5.4	5.5	5.5	6.0	6.3	6.1	6.2	6.6	6.6	6.4	8.4	5.8	6.1	6.0				
	1956	5.2	5.4	2.7	5.0	6.8	5.3	5.9	5.7	4.9	3.8	4.6	5.7	4.9	6.3	8.2	7.2	7.6	6.0	5.8	6.1				
1961	6.5	4.0	—	5.0	4.8	5.2	4.7	4.9	5.4	5.5	5.6	5.4	5.5	8.5	5.3	6.0	6.5	6.0	5.8	5.9					
1966	6.0	—	—	6.0	5.2	—	5.7	5.3	5.2	4.9	—	5.7	5.2	5.4	4.2	10.0	7.5	5.3	5.7	5.4	5.8				
For Mentally Handicapped	1912	Not available	Not available	Not available	5.2	Not available	Not available	Not available	5.6	Not available	Not available	Not available	7.2	Not available	Not available	Not available	—	Not available	Not available	Not available	—				
	1924	—	5.2	5.5	5.3	—	6.6	6.3	6.4	—	6.8	7.2	7.1	—	6.5	7.6	7.1	8.0	6.2	6.3	5.8				
	1931	4.0	5.6	5.3	5.4	7.0	6.2	5.8	6.0	—	7.0	6.9	7.0	—	6.4	7.0	6.7	6.6	6.2	6.0	6.3				
	1936	—	5.0	5.0	5.0	—	6.1	6.0	6.0	—	6.2	6.1	6.2	—	6.2	7.6	7.2	7.8	6.0	6.0	6.0				
	1944	—	4.7	4.8	4.7	—	5.5	5.8	5.7	—	6.3	5.8	5.9	5.0	7.4	6.4	6.6	8.0	5.8	5.8	5.1				
	1951	3.5	5.6	5.8	5.7	—	6.2	6.2	6.2	5.2	6.6	6.3	6.4	6.0	7.8	7.8	7.9	7.9	5.2	5.4	6.2				
	1956	4.5	5.1	5.5	5.2	6.7	6.1	5.9	6.0	5.8	4.3	5.7	5.7	5.8	6.0	7.7	8.1	7.9	5.4	6.2	6.2				
1961	5.0	5.4	4.9	5.1	5.5	5.7	5.6	5.6	5.1	5.6	5.8	5.7	5.7	6.3	8.0	7.2	7.6	5.8	6.2	6.1					
1966	—	—	5.0	5.0	4.8	—	5.7	5.5	5.5	5.5	—	5.9	5.8	6.3	7.0	6.7	6.8	5.5	6.4	6.1	6.3				
All Schools and Classes	1912	Not available	Not available	Not available	4.3	Not available	Not available	Not available	6.2	Not available	Not available	Not available	7.0	Not available	Not available	Not available	6.5	Not available	Not available	Not available	6.6				
	1924	5.0	5.0	5.3	5.1	5.9	6.1	6.6	6.1	6.0	6.2	6.8	6.2	6.2	6.3	6.5	6.3	6.4	6.0	6.4	6.2				
	1931	5.1	5.3	5.1	5.2	5.7	5.9	5.9	5.8	5.9	6.0	6.0	6.0	6.2	6.1	6.5	6.1	5.9	5.9	6.4	5.9				
	1936	4.8	5.1	4.8	4.9	5.5	5.8	5.7	5.7	5.8	6.0	5.9	5.9	6.2	6.4	6.4	6.3	5.9	5.8	5.8	5.8				
	1944	4.6	4.9	4.8	4.7	5.0	5.3	5.2	5.2	5.4	5.7	5.5	5.5	6.0	6.3	6.1	6.0	6.4	5.8	5.8	5.7				
	1951	4.8	5.1	5.2	5.0	5.1	5.3	5.2	5.2	5.3	5.5	5.5	5.4	6.2	6.3	6.2	6.2	6.4	5.5	5.5	5.4				
	1956	4.9	5.0	5.1	4.9	5.1	5.1	5.3	5.2	5.2	5.5	5.4	5.4	6.2	6.3	6.6	6.5	6.3	5.6	5.6	5.5				
1961	4.9	5.2	4.5	4.9	5.1	5.3	5.0	5.1	5.0	5.2	4.9	4.9	5.0	6.2	5.9	5.8	6.2	5.4	5.4	5.4					
1966	4.7	—	4.3	4.6	5.0	—	5.0	5.0	5.0	5.2	4.7	5.1	5.2	6.5	6.3	6.3	6.1	5.5	5.5	5.3	5.6				

SURVEY.—Table A.4.—SUMMARY OF HOUSING INFORMATION PROVIDED BY PARENTS AT THE TIME OF ROUTINE MEDICAL INSPECTION IN 1966.

TYPE OF OCCUPANCY, SIZE OF HOUSE AND AVERAGE NUMBER OF INMATES OVER AND UNDER 10 YEARS OF AGE.

School or Class	Type of Occupancy	One Apartment Inmates			Two Apartments Inmates			Three Apartments Inmates			Four Apartments Inmates			Five or more Apartments Inmates			Totals Inmates			Number of Pupils Examined and Percentage of Total
		+10	—10	Total	+10	—10	Total	+10	—10	Total	+10	—10	Total	+10	—10	Total	+10	—10	Total	
Non-Transferred	Tenant	2.1	2.4	4.5	2.7	2.2	4.9	3.2	1.8	5.0	4.1	1.9	6.1	4.4	2.0	6.4	3.5	1.9	5.4	16,410 (86.4)
	Landlord	2.3	2.5	4.8	2.5	2.3	4.7	2.8	1.7	4.5	3.0	1.6	4.6	3.5	1.3	4.8	3.1	1.6	4.7	2,400 (12.6)
	Lodger	1.9	2.5	4.4	2.9	2.4	5.3	4.0	1.6	5.7	3.8	2.0	5.8	5.1	2.2	7.2	3.5	2.1	5.6	188 (1.0)
Total ..		2.1	2.4	4.5	2.7	2.2	4.9	3.2	1.8	5.0	4.0	1.9	5.9	4.1	1.7	5.8	3.5	1.9	5.4	18,998 (100.0)
Transferred	Tenant	2.3	2.5	4.8	2.8	2.4	5.1	3.3	2.2	5.5	4.4	2.5	6.8	5.0	2.7	7.6	3.7	2.4	6.1	9,911 (90.6)
	Landlord	2.5	2.3	4.8	2.5	2.7	5.3	2.9	2.4	5.3	3.0	2.5	5.5	4.1	2.1	6.2	3.2	2.4	5.6	929 (8.5)
	Lodger	0.2	0.2	0.4	3.0	2.4	5.4	3.3	2.9	6.2	4.2	2.4	6.6	5.4	3.6	9.0	3.6	2.6	6.2	101 (0.9)
Total ..		2.3	2.5	4.8	2.7	2.4	5.2	3.3	2.2	5.5	4.3	2.5	6.8	4.8	2.6	7.4	3.6	2.4	6.0	10,941 (100.0)
For Physically Handicapped	Tenant	2.0	4.0	6.0	2.4	2.3	4.7	3.1	2.2	5.3	3.8	2.2	6.0	6.0	4.5	10.5	3.4	2.3	5.8	56 (88.9)
	Landlord	—	—	—	3.0	4.5	7.5	2.0	1.5	3.5	6.0	—	6.0	2.0	2.5	4.5	2.9	2.4	5.3	7 (11.1)
	Lodger	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total ..		2.0	4.0	6.0	2.6	2.8	5.3	3.0	2.1	5.1	3.9	2.1	6.0	4.0	3.5	7.5	3.4	2.3	5.7	63 (100.0)
For Mentally Handicapped	Tenant	3.0	3.5	6.5	3.8	1.8	5.6	3.8	2.0	5.8	4.8	1.9	6.7	4.8	3.3	8.1	4.2	2.1	6.3	307 (97.5)
	Landlord	—	—	—	3.0	2.0	5.0	—	—	—	5.0	3.0	8.0	5.0	4.0	9.0	4.0	3.0	7.3	3 (1.0)
	Lodger	—	—	—	4.0	1.3	5.3	—	—	—	4.0	2.0	6.0	—	—	—	4.0	1.4	5.4	5 (1.6)
Total ..		3.0	3.5	6.5	3.8	1.8	5.6	3.9	2.0	5.8	4.8	1.9	6.7	4.8	3.4	8.1	4.2	2.1	6.3	315 (100.0)
All Schools and Classes	Tenant	2.2	2.4	4.6	2.8	2.2	5.0	3.3	2.0	5.2	4.2	2.1	6.4	4.6	2.3	6.9	3.6	2.1	5.7	26,684 (88.0)
	Landlord	2.4	2.4	4.8	2.5	2.4	4.9	2.8	1.9	4.7	3.0	1.8	4.8	3.6	1.5	5.1	3.1	1.8	5.0	3,339 (11.0)
	Lodger	1.9	2.5	4.4	3.0	2.3	5.3	3.7	2.2	5.9	3.9	2.1	6.1	5.1	2.4	7.6	3.5	2.3	5.8	294 (1.0)
Total ..		2.2	2.4	4.6	2.7	2.3	5.0	3.2	2.0	5.2	4.1	2.1	6.3	4.3	2.0	6.3	3.5	2.1	5.6	30,317 (100.0)

**SURVEY.—Table B.1.—AVERAGE HEIGHTS AND WEIGHTS OF BOYS IN ORDINARY SCHOOLS
ARRANGED ACCORDING TO HOUSING CONDITIONS—NUMBERS OF BOYS IN 1966 AS IN
TABLE A.1.**

Age	Year	Height in inches						Weight in lbs.					
		Number of Apartments						Number of Apartments					
		1	2	3	4	5 +	All	1	2	3	4	5 +	All
5 years	1906	39.0	39.9	40.7	41.7	41.4	40.1	37.2	38.6	39.5	40.6	40.1	38.7
	1924	40.2	40.3	41.3	42.3	42.2	40.7	38.1	*†37.8	39.9	41.6	41.6	39.1
	1931	40.3	40.7	41.6	42.3	42.7	40.9	38.4	39.1	40.3	41.5	41.9	39.5
	1936	40.9	41.2	41.7	†42.1	†42.6	41.4	39.0	39.7	†40.3	†41.1	42.1	39.9
	1944	41.3	41.7	42.0	42.4	52.7	41.8	40.5	41.1	41.4	42.1	42.2	41.2
	1951	41.6	42.2	42.7	*42.6	43.1	42.3	40.8	41.8	42.4	*42.3	43.0	41.9
	1956	41.8	†42.2	†42.6	*†42.6	43.2	42.4	41.2	41.9	42.5	42.8	43.8	42.3
	1961	42.1	42.5	42.8	*42.7	†43.1	42.7	41.7	42.5	†42.8	*†42.6	†43.2	42.6
	1966	†42.0	42.6	†42.7	*†42.7	43.2	†42.7	†41.1	†42.3	†42.6	42.7	†43.2	†42.6
9 years	1906	46.5	47.6	48.2	48.9	48.9	47.7	51.4	53.1	54.8	56.3	56.3	53.6
	1924	—	—	—	—	—	49.0	—	—	—	—	—	56.1
	1931	48.3	49.0	49.8	50.6	51.0	49.3	55.1	56.6	58.5	60.0	61.5	57.2
	1936	49.0	49.5	50.0	†50.5	†50.8	49.7	56.5	57.4	58.5	†59.6	†61.1	58.0
	1944	50.0	50.6	50.9	51.4	51.4	50.7	59.3	60.7	61.3	61.8	62.7	60.9
	1951	50.6	51.1	51.5	51.6	51.7	51.3	60.5	61.8	62.7	*62.7	63.6	62.2
	1956	†50.6	†51.0	51.6	51.7	52.1	51.5	61.1	62.3	64.0	*64.0	65.0	63.5
	1961	51.0	51.4	51.8	*51.8	52.4	51.8	63.5	63.6	64.5	*†63.9	66.0	64.3
	1966	—	—	—	—	—	—	—	—	—	—	—	—
13 years	1906	53.4	54.1	55.1	55.8	55.8	54.5	69.9	72.3	75.3	76.8	76.8	73.5
	1924	54.1	54.4	55.7	56.5	57.4	†44.5	72.2	73.2	78.1	79.2	85.8	74.9
	1931	55.3	55.7	56.6	57.5	58.0	56.2	77.1	78.2	81.4	84.2	86.8	79.7
	1936	56.1	56.8	57.4	57.9	59.1	57.2	79.2	81.6	83.6	85.7	90.9	82.9
	1944	57.8	58.3	58.7	*58.7	59.3	58.5	87.0	87.8	89.1	*89.0	91.8	88.6
	1951	†57.7	58.7	59.0	59.1	59.5	58.9	†85.2	89.3	90.1	90.2	93.2	89.8
	1956	58.0	†58.7	59.3	*59.8	59.8	59.1	†87.9	91.1	92.7	*91.7	94.4	92.0
	1961	59.1	59.5	60.0	*59.9	60.5	59.7	92.1	96.4	96.8	*96.0	97.6	96.5
	1966	†57.0	†59.4	60.1	*60.0	60.7	60.1	†87.3	†95.5	97.3	*96.1	98.9	96.9

* Exceptional averages which contradict the general trend of increase in average measurements with increase in number of apartments.

† Exceptional averages which contradict the general trend of increase in average measurements from year to year.

**SURVEY.—Table B.1.—AVERAGE HEIGHTS AND WEIGHTS OF GIRLS IN ORDINARY SCHOOLS
ARRANGED ACCORDING TO HOUSING CONDITIONS—NUMBERS OF GIRLS IN 1966 AS IN
TABLE A.1.**

Age	Year	Height in inches						Weight in lbs.					
		Number of Apartments						Number of Apartments					
		1	2	3	4	5 +	All	1	2	3	4	5 +	All
5 years	1906	38.9	39.8	40.2	41.7	41.0	39.9	36.6	37.8	38.0	39.5	39.2	37.8
	1924	39.3	40.1	41.2	41.9	42.1	40.3	37.3	38.0	38.5	40.0	40.3	†37.4
	1931	40.0	40.5	41.3	†41.7	42.4	40.7	†37.1	†37.8	38.8	†39.4	40.9	38.1
	1936	40.6	41.0	†41.3	42.0	†42.4	41.1	37.5	38.2	†38.8	†39.4	†40.8	38.4
	1944	41.0	41.3	41.7	42.4	42.8	41.4	38.9	39.4	39.8	40.6	*†40.5	39.6
	1951	41.3	41.7	42.3	42.4	42.8	42.0	39.4	40.2	40.8	41.1	41.7	40.5
	1956	41.4	41.8	†42.2	†42.4	†42.7	†42.0	39.6	40.5	41.1	41.4	42.2	40.8
	1961	41.7	42.1	42.4	42.5	43.0	42.6	40.1	41.2	41.3	†41.4	42.4	41.3
	1966	†41.6	42.2	42.5	*†42.4	†43.0	†42.4	†39.7	†41.1	41.5	*41.5	42.8	41.5
	1906	46.2	46.9	47.7	48.6	48.6	47.2	49.6	51.4	52.8	54.7	54.7	51.9
9 years	1924	—	—	—	—	—	47.9	—	—	—	—	—	53.3
	1931	48.1	48.8	49.5	50.2	50.7	49.1	53.2	54.5	56.0	57.6	59.3	55.1
	1936	48.6	49.1	49.7	†50.1	50.8	49.4	54.2	55.3	56.4	†57.3	60.3	55.9
	1944	49.7	50.2	50.5	50.6	†50.8	50.3	57.4	58.5	59.3	*58.9	60.8	58.8
	1951	50.0	50.6	51.0	51.1	51.6	50.8	58.8	59.8	60.6	60.9	62.0	60.3
	1956	†50.0	50.7	51.2	*51.2	51.8	51.0	60.2	62.0	62.7	*62.1	63.9	62.3
	1961	50.5	51.1	51.6	*51.5	52.0	51.5	60.5	62.9	64.5	*63.2	65.5	63.8
	1966	—	—	—	—	—	—	—	—	—	—	—	—
	1906	53.9	54.8	55.5	56.4	56.4	55.1	71.9	73.9	76.3	79.3	79.3	75.1
13 years	1924	55.2	*†54.6	56.5	57.3	*56.8	56.3	76.3	76.8	80.0	81.6	*80.1	78.2
	1931	56.0	56.8	57.5	58.3	58.8	57.1	79.5	82.0	84.3	87.3	96.0	85.2
	1936	57.4	57.8	58.3	58.7	59.5	58.1	84.9	86.4	88.2	89.6	94.4	87.6
	1944	58.5	58.9	59.2	59.4	60.1	58.8	90.3	92.0	*91.1	93.3	96.5	92.4
	1951	†58.4	†58.9	59.4	*†59.4	†60.1	59.2	91.0	93.0	94.7	*94.4	97.2	94.0
	1956	58.6	59.4	59.8	*59.7	60.3	59.7	92.2	97.4	97.7	*96.6	99.7	97.3
	1961	59.5	59.9	60.2	60.4	60.8	60.3	102.2	102.4	*101.7	*101.7	104.4	102.2
	1966	†58.6	60.0	†60.2	*†60.2	61.0	†60.3	†93.7	†101.4	102.1	†100.7	†104.1	†101.8
	1906	—	—	—	—	—	—	—	—	—	—	—	—
	1924	—	—	—	—	—	—	—	—	—	—	—	—

* Exceptional averages which contradict the general trend of increase in average measurements with increase in number of apartments.

† Exceptional averages which contradict the general trend of increase in average measurements from year to year.

SURVEY.—Table B.2.—AVERAGE MEASUREMENTS OF 8,629 BOYS OF 5 YEARS OF AGE IN ORDINARY SCHOOLS ARRANGED ACCORDING TO NUMBERS OF APARTMENTS AND OF INMATES.

No. of Inmates per house (Equivalent Adults).	One Apartment.			Two Apartments.			Three Apartments.			Four Apartments.			Five or more Apartments.		
	Children Examined.			Children Examined.			Children Examined.			Children Examined.			Children Examined.		
	No.	Ht. (ins.).	Wt. (lbs.).	No.	Ht. (ins.).	Wt. (lbs.).	No.	Ht. (ins.).	Wt. (lbs.).	No.	Ht. (ins.).	Wt. (lbs.).	No.	Ht. (ins.).	Wt. (lbs.).
1½	14	43.7	44.8	11	44.4	46.9	6	42.7	41.2	3	42.7	42.6	1	42.2	39.2
2	17	42.6	41.4	27	42.5	41.4	8	43.3	43.9	3	44.9	48.9	2	44.0	48.0
2½	31	41.9	41.0	239	43.2	43.2	213	43.4	43.8	58	44.0	45.1	30	44.3	44.4
3	52	42.4	41.8	628	42.9	42.8	575	43.0	43.2	209	43.4	43.7	122	44.3	44.4
3½	41	41.9	40.9	460	42.6	42.4	830	42.7	42.8	254	43.3	43.8	107	43.6	44.5
4	23	41.5	40.9	295	42.5	42.2	528	42.6	42.4	286	43.1	43.3	87	43.5	43.1
4½	17	41.3	38.9	199	42.4	42.3	376	42.8	42.3	356	42.7	42.6	73	43.8	44.4
5	15	41.0	39.4	119	41.8	41.1	229	42.5	42.4	249	42.4	42.5	56	43.2	42.2
5½	4	42.1	44.9	67	42.3	41.1	170	42.6	42.6	245	42.6	42.5	57	42.9	43.2
6	—	—	—	42	42.0	41.0	90	42.1	41.5	193	42.3	41.9	49	42.6	43.6
6½	2	41.5	39.5	28	42.4	41.6	47	41.6	41.5	117	42.2	41.6	37	41.6	41.1
7	1	42.2	38.2	16	42.3	42.1	34	40.7	39.7	86	42.4	42.6	21	42.7	42.4
7½	—	—	—	8	41.1	38.8	27	42.0	41.2	77	42.1	41.2	38	42.5	41.8
8	—	—	—	6	43.4	45.8	23	42.3	40.9	52	41.3	41.2	24	41.9	40.7
8½	1	37.7	33.7	4	41.8	42.5	10	41.7	40.3	24	41.8	39.8	31	42.4	41.6
9	—	—	—	—	—	—	8	42.2	41.8	27	41.5	40.1	16	42.2	40.7
9½	—	—	—	2	40.5	39.5	1	41.7	43.2	14	42.2	42.7	12	42.7	44.3
10+	1	40.2	37.7	2	40.3	37.3	5	42.2	41.2	21	41.7	41.1	40	42.0	41.1
Total ...	219	42.0	41.1	2,153	42.6	42.4	3,180	42.7	42.6	2,274	42.7	42.7	803	43.2	43.2

N.B.—For the purpose of Table C.2, the groups above the heavy lines are regarded as not overcrowded, those within the lines as moderately overcrowded, and those below the lines as much overcrowded.

SURVEY.—Table B.3.—AVERAGE MEASUREMENTS OF CHILDREN IN ORDINARY SCHOOLS FROM HOUSES OF TWO APARTMENTS ARRANGED ACCORDING TO NUMBER OF INMATES OF ALL AGES.

Age and Sex		Number of Inmates per house																	Total	
		1½	2	2½	3	3½	4	4½	5	5½	6	6½	7	7½	8	8½	9	9½		10 +
5 yrs.	No. of Children	11	27	239	628	460	295	199	119	67	42	28	16	8	6	4	—	2	2	2,153
	Boys																			
	Height (ins.)	44.4	42.5	43.2	42.9	42.6	42.5	42.4	41.8	42.3	42.0	42.4	42.3	41.1	43.4	41.8	—	40.5	40.3	42.6
	Weight (lbs.)	46.9	41.4	43.2	42.8	42.4	42.2	42.3	41.1	41.1	41.0	41.6	42.1	38.8	45.8	42.5	—	39.5	37.3	42.4
	No. of Children	16	30	227	603	415	262	171	105	60	34	24	22	13	9	1	1	4	2	1,999
	Girls																			
	Height (ins.)	43.3	43.0	42.5	42.5	42.2	42.2	41.9	42.0	41.9	41.7	42.5	42.0	40.7	41.6	39.8	40.8	40.8	42.0	42.3
	Weight (lbs.)	43.9	43.4	41.7	41.5	41.0	41.0	40.3	40.4	40.8	39.2	41.3	41.9	38.3	40.5	31.8	41.8	36.6	37.0	40.1
	13 yrs.																			
	No. of Children	—	33	12	133	56	116	59	79	47	49	19	24	6	8	3	1	2	5	652
	Boys																			
	Height (ins.)	—	60.6	59.5	60.0	60.0	59.4	59.8	58.9	58.0	59.3	56.8	59.6	60.5	57.4	58.6	59.3	54.8	58.6	59.4
	Weight (lbs.)	—	100.1	95.6	100.6	100.1	94.7	91.0	92.3	92.8	94.0	81.8	97.3	102.6	92.5	86.1	130.7	73.8	88.9	95.5
	No. of Children	—	20	11	126	49	123	86	72	48	52	22	21	9	3	7	3	2	1	655
	Girls																			
	Height (ins.)	—	60.1	60.2	60.8	59.8	60.2	59.9	60.2	60.3	58.6	58.7	58.8	58.4	60.1	59.5	59.3	58.8	59.2	60.0
	Weight (lbs.)	—	104.3	102.8	105.9	102.0	105.7	97.1	102.3	101.0	93.0	94.7	91.0	88.5	98.9	105.7	111.6	93.2	119.2	101.4

SURVEY.—Table C.1.—NUMBERS AND PERCENTAGES OF CHILDREN IN ORDINARY SCHOOLS (SEE TABLE A.1.) PLACED IN VARIOUS MEDICAL ("REMEDIABILITY") CLASSES ARRANGED ACCORDING TO NUMBERS OF APARTMENTS IN THEIR HOUSES.

Number of Apartments			One		Two		Three		Four		Five or more		MEDICAL CLASSIFICATION
Age	Type of School	Medical Classification	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.	
5 years	Non- Transferred	Class III	45	17.2	411	15.7	627	16.5	406	15.0	162	14.2	Class I.—Free from: defect or having defects of clothing cleanliness and/or minor defects of teeth only.
		Class IV, V	59	22.5	509	19.5	692	18.2	426	15.8	150	13.1	
		Class III	31	18.0	286	18.6	433	17.4	285	16.6	68	12.5	
		Class IV, V	37	21.5	314	20.4	491	19.8	231	13.5	97	17.8	
13 years	Total	Class III	76	17.5	697	16.8	1,060	16.9	691	15.7	230	13.6	Class II.—Having one or more minor defects of vision and/or defects of teeth requiring treatment.
		Class IV, V	96	22.1	823	19.8	1,183	18.8	657	14.9	247	14.6	
		Class III	4	6.9	106	12.2	301	10.0	273	9.4	126	8.3	
		Class IV, V	7	12.1	108	12.5	318	10.6	260	9.0	172	11.3	
	Non- Transferred	Class III	3	11.5	53	12.0	202	13.1	177	10.3	63	9.2	Class III.—Having one or more ailments other than above from which complete recovery is anticipated in a few weeks ('temporary' defects).
		Class IV, V	2	7.7	59	13.4	204	13.2	182	10.6	75	11.0	
		Class III	7	8.3	159	12.2	503	11.0	450	9.7	189	8.6	
		Class IV, V	9	10.7	167	12.8	522	11.5	442	9.6	247	11.2	
All ages	Non- Transferred	Class III	49	15.3	517	14.9	928	13.6	679	12.1	228	10.8	Class I'.—Having defects from which improvement is not considered possible.
		Class IV, V	66	20.6	617	17.7	1,010	14.8	686	12.2	322	12.1	
		Class III	34	17.2	339	17.2	635	15.8	462	13.4	131	10.7	
		Class IV, V	39	19.7	373	18.8	695	17.2	413	12.0	172	14.0	
	Total	Class III	83	16.0	856	15.7	1,563	14.4	1,141	12.6	419	10.8	Note.—Percentages for Classes I and II are not given as they are the balance of 100 per cent. after deducting the percentages shown.
		Class IV, V	105	20.3	990	18.1	1,705	15.7	1,099	12.2	494	12.7	

STATISTICAL APPENDIX.

TABLE I—TOTAL NUMBER OF CHILDREN EXAMINED.

(a) SYSTEMATIC EXAMINATIONS.

Nursery	1,784
Entrants	14,517
13-year-olds	13,051
16-year-olds	2,770
Others	953
Special Schools and Classes—	
physically handicapped	120
mentally handicapped	378

(b) OTHER EXAMINATIONS.

Nursery (special and re-inspection cases)	2,845
Vision testing (9-year-olds)	7,747
Vision testing (Keystone apparatus)	11,333
Special Cases (non-routines)	26,570
Re-inspections (cases "at risk")	15,690
Leaving Interviews	7,678
Examinations regarding mental defect	2,148
Discharges in Special Schools and Classes	103
Audiometric Survey (by audiometricians)	22,798
Applicants for Licences under Byelaws	390
Adult Employees of Corporation	2,012
Holidays Abroad, Educational Excursions, Camps	16,931
Residential School Examinations	6,624
Pre-Vocational Students	1,121
Remand Home Examinations	3,305
Cleanliness Inspections (by nurses)	169,789

TABLE II—AVERAGE MEASUREMENTS OF SCHOOL CHILDREN DURING YEAR ENDED 31st DECEMBER, 1966.

	Boys		Girls	
	Height (ins.)	Weight (lbs.)	Height (ins.)	Weight (lbs.)
5 years 4 months				
Number examined	7,284		6,544	
Average measurements	42.60	42.42	42.32	41.31
13 years 5 months				
Number examined	5,509		5,625	
Average measurements	59.95	96.97	60.02	101.87
16 years				
Average age (in months beyond year of age)	6.00		6.19	
Number examined	1,086		899	
Average measurements	67.63	135.93	63.59	122.84

TABLE IIa—SYSTEMATIC EXAMINATION OF CHILDREN IN ORDINARY SCHOOLS.
NUMBERS AND PERCENTAGES OF CHILDREN SUFFERING FROM DEFECTS.

An individual child may appear in several sections but only once in any section, i.e., only the child's major defect in any section is recorded—any minor defects in the same section are ignored in this table. "Sections" are indicated by the horizontal lines across the columns, and the section totals give the numbers of individual children having at least one defect in that section.

Age Groups	Entrants		13-year-olds		16-year-olds		All ages	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Number examined	7,642	6,875	6,430	6,621	1,392	1,378	15,970	15,321
Totals								
31,291								
Nature of defects found								
1. CLOTHING UNSATISFACTORY	Insufficient		1		—		4	
	Ragged		(0.01)		(0.02)		(0.03)	
	Dirty		1		—		1	
Totals	2		7		12		9	
	(0.03)		(0.1)		(0.2)		(0.1)	
	39		10		13		14	
2. FOOTGEAR UNSATISFACTORY	Unsatisfactory		(0.1)		(0.2)		(0.1)	
	None		3		3		10	
	17		(0.04)		(0.1)		(0.1)	
Totals	2		8		3		10	
	(0.03)		(0.1)		(0.1)		(0.1)	
	17		3		3		7	
3. UNCLEANLINESS	Dirty		(0.04)		(0.1)		(0.1)	
	Nits		—		1		6	
	Vermineous		619		(0.02)		(0.04)	
(a) Head	263		(9.0)		7.43		552	
	12		(3.4)		(11.2)		(3.3)	
	52		(0.2)		16		19	
(b) Body	2		(0.2)		(0.2)		(0.1)	
	41		(0.03)		10		25	
	6		(0.1)		(0.2)		(0.2)	
Totals	283		(0.01)		770		607	
	638		(9.3)		(11.6)		(3.8)	
	2,088		11		(0.8)		1,481	
	(6.7)		(0.1)		(0.8)		(9.7)	

4. SKIN	Ringworm</
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TABLE IIa—Continued

Age Groups	Entrants		13-year-olds		16-year-olds		All ages	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Totals
7. NASO PHARYNX								
(a) <i>Nose</i>								
Obstruction—for observation	38 (0.5)	37 (0.5)	13 (0.2)	8 (0.1)	1 (0.1)	—	54 (0.3)	100 (0.3)
Obstruction for operation	18 (0.2)	14 (0.2)	3 (0.1)	6 (0.1)	—	—	22 (0.1)	42 (0.1)
Catarrh	87 (1.1)	48 (0.7)	20 (0.3)	17 (0.3)	6 (0.4)	—	114 (0.7)	181 (0.6)
Other conditions	14 (0.2)	9 (0.1)	18 (0.3)	18 (0.3)	2 (0.1)	1 (0.1)	35 (0.2)	63 (0.2)
(b) <i>Throat</i>								
Tonsils—for observation	456 (6.0)	426 (6.2)	70 (1.1)	103 (1.6)	4 (0.3)	6 (0.4)	537 (3.4)	1,084 (3.5)
Tonsils—for operation	158 (2.1)	114 (1.7)	12 (0.2)	18 (0.3)	—	—	171 (1.1)	303 (1.0)
Other conditions	10 (0.1)	4 (0.1)	3 (0.1)	4 (0.1)	3 (0.2)	—	17 (0.1)	26 (0.1)
(c) <i>Glands</i>								
For observation	104 (1.4)	85 (1.2)	20 (0.3)	12 (0.2)	1 (0.1)	1 (0.1)	132 (0.8)	232 (0.7)
For operation	—	2 (0.03)	—	—	—	—	—	2 (0.01)
Totals	885 (11.6)	739 (10.7)	159 (2.5)	186 (2.8)	17 (1.2)	8 (0.6)	1,082 (6.8)	2,033 (6.5)
8. EYES								
(a) <i>External Diseases</i>								
Blepharitis	54 (0.7)	34 (0.5)	64 (1.0)	73 (1.1)	4 (0.3)	5 (0.4)	125 (0.8)	241 (0.8)
Conjunctivitis	6 (0.1)	—	2 (0.03)	4 (0.1)	1 (0.1)	1 (0.1)	9 (0.1)	14 (0.04)
Corneal opacities	—	—	3 (0.1)	—	1 (0.1)	—	4 (0.03)	4 (0.01)
Strabismus	244 (3.2)	253 (3.7)	71 (1.1)	82 (1.2)	7 (0.5)	7 (0.5)	332 (2.1)	677 (2.2)
Other diseases	20 (0.3)	13 (0.2)	12 (0.2)	15 (0.2)	1 (0.1)	—	36 (0.2)	65 (0.2)
Totals	324 (4.2)	300 (4.4)	152 (2.4)	174 (2.6)	14 (1.0)	13 (0.9)	506 (3.2)	1,001 (3.2)

8. EYES										
<i>(b) Visual acuity (Snellen)*</i>										
Fair, 6/9 or 6/12	...	265 (3.5)	274 (4.0)	470 (7.3)	539 (8.1)	117 (3.4)	130 (9.4)	900 (5.7)	968 (6.4)	1,868 (6.0)
Bad, 6/18 or worse	...	19 (0.3)	16 (0.2)	181 (2.8)	228 (3.4)	23 (1.7)	36 (2.6)	236 (1.5)	291 (1.9)	527 (1.7)
Totals	...	284 (3.8)	290 (4.3)	651 (10.1)	767 (11.6)	140 (10.1)	166 (12.0)	1,136 (7.2)	1,259 (8.3)	2,395 (7.7)
Recommended for Refraction										
Recommended for Re-test	...	141 (1.8)	129 (1.9)	266 (4.1)	243 (3.7)	36 (2.6)	38 (2.8)	464 (2.9)	428 (2.8)	892 (2.9)
Totals	...	34 (0.4)	45 (0.7)	67 (1.0)	75 (1.1)	16 (1.1)	16 (1.2)	121 (0.8)	139 (0.9)	260 (0.8)
<i>(c) Colour vision abnormality</i>										
Totals	...	175 (2.3)	174 (2.5)	333 (5.2)	318 (4.8)	52 (3.7)	54 (3.9)	585 (3.7)	567 (3.7)	1,152 (3.7)
<i>(c) Colour vision abnormality</i>										
Totals	...	85 (1.1)	10 (0.1)	224 (3.5)	5 (0.1)	36 (2.6)	4 (0.3)	394 (2.5)	21 (0.1)	415 (1.3)
9. EARS										
<i>(a) Diseases</i>										
Otorrhoea	...	46 (0.6)	34 (0.5)	30 (0.5)	30 (0.5)	5 (0.4)	—	83 (0.5)	64 (0.4)	147 (0.5)
Other diseases	...	16 (0.2)	11 (0.2)	10 (0.2)	15 (0.2)	3 (0.2)	2 (0.1)	29 (0.2)	28 (0.2)	57 (0.2)
<i>(b) Defective hearing</i>										
Grade I—For ordinary class	...	33 (0.4)	27 (0.4)	20 (0.3)	15 (0.2)	2 (0.1)	3 (0.2)	57 (0.4)	45 (0.3)	102 (0.3)
IIa—for front seat	...	7 (0.1)	6 (0.1)	10 (0.2)	8 (0.1)	—	—	18 (0.1)	14 (0.1)	32 (0.1)
IIb—for class for semi-deaf	...	1 (0.01)	—	—	1 (0.02)	—	—	1 (0.01)	1 (0.01)	2 (0.01)
III—for Deaf class	...	—	—	—	—	—	—	—	—	—
Totals	...	103 (1.3)	78 (1.1)	70 (1.1)	69 (1.0)	10 (0.7)	5 (0.4)	188 (1.2)	152 (1.0)	340 (1.1)

* The record of defective vision applies to the better eye and is *with spectacles if worn at examination*. Entrants were examined by the "E" test and other age-groups by the Snellen test. The percentages relate to 31,092 children—199 cases fewer than the total number seen at routine medical inspection.

13. LUNGS		20	11	10	8	—	—	33	20	53
Chronic Bronchitis	...	(0.3)	(0.2)	(0.2)	(0.1)	—	—	(0.2)	(0.1)	(0.2)
Suspected Tuberculosis	...	—	2	4	9	—	—	4	11	15
			(0.03)	(0.1)	(0.1)			(0.03)	(0.1)	(0.1)
Catarrh	...	248	204	75	53	4	6	337	267	604
		(3.2)	(3.0)	(1.2)	(0.8)	(0.3)	(0.4)	(2.1)	(1.7)	(1.9)
Other diseases	...	33	31	20	22	2	1	55	56	111
		(0.4)	(0.5)	(0.3)	(0.3)	(0.1)	(0.1)	(0.3)	(0.4)	(0.4)
Totals	...	301	248	109	92	6	7	429	354	783
		(3.9)	(3.6)	(1.7)	(1.1)	(0.4)	(0.5)	(2.7)	(2.3)	(2.5)
14. DEFORMITIES		81	39	39	34	3	7	134	82	216
(a) Congenital	...	(1.1)	(0.6)	(0.6)	(0.5)	(0.2)	(0.5)	(0.8)	(0.5)	(0.7)
(b) Acquired	...	5	1	9	5	1	3	17	9	26
Infantile Paralysis	...	(0.1)	(0.01)	(0.1)	(0.1)	(0.1)	(0.2)	(0.1)	(0.1)	(0.1)
Probable Rickets	...	12	15	7	—	1	—	21	15	36
		(0.2)	(0.2)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)
Cerebral Palsy	...	5	3	4	1	1	1	10	5	15
		(0.1)	(0.04)	(0.1)	(0.02)	(0.1)	(0.1)	(0.1)	(0.03)	(0.1)
Other causes	...	212	167	165	159	32	30	428	362	790
		(2.8)	(2.4)	(2.6)	(2.4)	(2.3)	(2.2)	(2.7)	(2.4)	(2.5)
Totals	...	315	225	224	199	38	41	610	473	1,083
		(4.1)	(3.3)	(3.5)	(3.0)	(2.7)	(3.0)	(3.8)	(3.1)	(3.5)
15. INFECTIOUS DISEASES		2	1	1	—	—	—	3	1	4
	...	(0.03)	(0.01)	(0.02)	—			(0.02)	(0.01)	(0.01)
16. ASTHMA		50	20	53	18	2	3	108	42	150
	...	(0.7)	(0.3)	(0.8)	(0.3)	(0.1)	(0.2)	(0.7)	(0.3)	(0.5)
17. DIABETES		1	—	5	4	—	3	7	8	15
	...	(0.01)	—	(0.1)	(0.1)		(0.2)	(0.04)	(0.1)	(0.1)
18. OTHER DISEASES OR DEFECTS		337	330	217	277	33	64	607	692	1,299
	...	(4.4)	(4.8)	(3.4)	(4.2)	(2.4)	(4.6)	(3.8)	(4.5)	(4.2)

TABLE IIb—ADDITIONAL INFORMATION REGARDING RESULTS OF SYSTEMATIC EXAMINATIONS.

Except in respect of the dual information regarding children who wore glasses, no child appears more than once in each section.

"Sections" are indicated by horizontal lines across the columns.

Age Groups	Entrants		13-year-olds		16-year-olds		All ages	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Parents present at examination	7,137 (93.4)	6,330 (92.1)	696 (10.8)	1,023 (15.5)	22 (1.6)	37 (2.7)	8,072 (50.5)	7,563 (49.4)
Children notified to parent as requiring treatment :—								
(a) Defects of clothing and/or cleanliness	695 (9.1)	636 (9.3)	124 (1.9)	134 (2.0)	5 (0.4)	10 (0.7)	841 (5.3)	800 (5.2)
By printed notice.	360 (4.7)	326 (4.7)	126 (2.0)	302 (4.6)	6 (0.4)	7 (0.5)	501 (3.1)	659 (4.3)
Verbally	1,314 (17.2)	986 (14.3)	677 (10.5)	596 (9.0)	98 (7.0)	134 (9.7)	2,151 (13.5)	1,756 (11.5)
(b) Other defects	791 (10.4)	756 (11.0)	541 (8.4)	586 (8.9)	72 (5.2)	87 (6.3)	1,444 (9.0)	1,472 (9.6)
Children noted for re-inspection :—								
(a) Defects of clothing, etc. (as above)	969 (12.7)	888 (12.9)	248 (3.9)	452 (6.8)	18 (1.3)	22 (1.6)	1,266 (7.9)	1,414 (9.2)
(b) Other defects	1,811 (23.7)	1,406 (20.5)	1,069 (16.6)	1,209 (18.3)	185 (13.3)	193 (14.0)	3,169 (19.8)	2,874 (18.8)
Children excluded from attendance at school	9 (0.1)	11 (0.2)	3 (0.1)	9 (0.1)	—	—	13 (0.1)	20 (0.1)
Children "free from defects" in terms of Table III :—								
(a) No recorded defect	3,164 (41.4)	2,876 (41.8)	4,417 (68.7)	4,140 (62.5)	1,032 (74.1)	982 (71.3)	8,893 (55.7)	8,250 (53.8)
(b) Defects of clothing only	2 (0.03)	4 (0.1)	13 (0.2)	8 (0.1)	1 (0.1)	—	16 (0.1)	13 (0.1)
(c) Defects of cleanliness only	104 (1.4)	219 (3.2)	195 (3.0)	531 (8.0)	—	11 (0.8)	305 (1.9)	793 (5.2)
(d) Minor dental defect with or without clothing and/or cleanliness defect(s)	1,522 (19.9)	1,370 (19.9)	47 (0.7)	54 (0.8)	11 (0.8)	3 (0.2)	1,620 (10.1)	1,469 (9.6)
Totals	15,635 (50.0)	15,635 (50.0)						

Teeth—	Sound	4,918 (64.4)	4,498 (65.4)	5,196 (80.8)	5,523 (83.4)	1,260 (90.5)	1,315 (95.4)	11,761 (73.6)	11,676 (76.2)	23,437 (74.9)
	One to four decayed	2,047 (26.8)	1,780 (25.8)	919 (14.3)	955 (14.4)	104 (7.5)	42 (3.1)	3,155 (19.8)	2,852 (18.6)	6,007 (19.2)
	Five or more decayed	677 (8.9)	597 (8.7)	315 (4.9)	143 (2.2)	28 (2.0)	21 (1.5)	1,054 (6.6)	793 (5.2)	1,847 (5.9)
Visual acuity :—										
Children who wore glasses at examination	With glasses—									
	Good, 6/6 ...	162 (2.1)	140 (2.1)	562 (8.7)	655 (9.9)	304 (21.8)	368 (26.7)	1,062 (6.7)	1,194 (7.8)	2,256 (7.3)
	Fair, 6/9, 6/12	19 (0.3)	19 (0.3)	109 (1.7)	149 (2.2)	58 (4.2)	70 (5.1)	198 (1.2)	245 (1.6)	443 (1.4)
	Bad, 6/18, etc.	—	3 (0.04)	15 (0.2)	52 (0.8)	5 (0.4)	17 (1.2)	21 (0.1)	73 (0.5)	94 (0.3)
	Without glasses									
Children not wearing glasses at examination	Good, 6/6 ...	124 (1.6)	117 (1.7)	174 (2.7)	244 (3.7)	67 (4.8)	106 (7.7)	379 (2.4)	479 (3.1)	858 (2.8)
	Fair, 6/9, 6/12	47 (0.6)	36 (0.5)	151 (2.3)	180 (2.7)	64 (4.6)	64 (4.6)	277 (1.7)	290 (1.9)	567 (1.8)
	Bad, 6/18, etc.	10 (0.1)	9 (0.1)	361 (5.6)	432 (6.5)	236 (17.0)	285 (20.7)	625 (3.9)	743 (4.9)	1,368 (4.4)
Children not wearing glasses at examination	Good, 6/6 ...	7,090 (94.1)	6,356 (93.7)	5,216 (81.1)	5,198 (78.5)	948 (68.1)	844 (61.2)	13,664 (86.1)	12,777 (84.0)	26,441 (85.0)
	Fair, 6/9, 6/12	246 (3.3)	255 (3.8)	361 (5.6)	390 (5.9)	59 (4.2)	60 (4.4)	702 (4.4)	723 (4.7)	1,425 (4.6)
	Bad, 6/18, etc.	19 (0.3)	13 (0.2)	166 (2.6)	176 (2.7)	18 (1.3)	19 (1.4)	215 (1.4)	218 (1.4)	433 (1.4)
Diphtheria Immunisation	Partial ...	230 (3.0)	181 (2.6)	35 (0.5)	19 (0.3)	1 (0.1)	12 (0.9)	270 (1.7)	215 (1.4)	485 (1.6)
	Completed ...	5,303 (69.4)	4,969 (72.3)	6,166 (95.9)	6,388 (96.5)	1,361 (97.8)	1,327 (96.3)	13,244 (82.9)	13,055 (85.2)	26,299 (84.0)
	Not immunised	2,109 (27.6)	1,725 (25.1)	229 (3.6)	214 (3.2)	30 (2.2)	39 (2.8)	2,456 (15.4)	2,051 (13.4)	4,507 (14.4)
Smallpox Vaccination	Successful vaccination ...	4,042 (52.9)	3,777 (54.9)	3,547 (55.2)	3,630 (54.8)	1,075 (77.2)	1,071 (77.7)	8,994 (56.3)	8,764 (57.2)	17,758 (56.8)
	Successful re-vaccination	7 (0.1)	6 (0.1)	4 (0.1)	9 (0.1)	1 (0.1)	1 (0.1)	12 (0.1)	16 (0.1)	28 (0.1)
	Unsuccessful or no vaccination	3,593 (47.0)	3,092 (45.0)	2,879 (44.8)	2,982 (45.0)	316 (22.7)	306 (22.2)	6,964 (43.6)	6,541 (42.7)	13,505 (43.2)

TABLE III—SYSTEMATIC MEDICAL EXAMINATION OF
ACCORDING TO REMEDIABILITY OF THE MAJOR

CLASSIFICATION	NO. OF CHILDREN EACH GROUP (AND		
	Entrants		
	Boys	Girls	Total
I. Children free from defects	4,792 (62.7)	4,469 (65.0)	9,261 (63.8)
II. Children (otherwise free from defects) who suffer from—			
(a) Defective vision not worse than 6/12 in the better eye with or without glasses; or	151 (2.0)	144 (2.1)	295 (2.0)
(b) Oral Sepsis	66 (0.9)	46 (0.7)	112 (0.8)
(c) Both (a) and (b)	1 (0.01)	1 (0.01)	2 (0.01)
Totals	218 (2.9)	191 (2.8)	409 (2.8)
III. Children suffering from ailments (other than those mentioned in II) from which complete recovery is anticipated within a few weeks ...	1,224 (16.0)	1,147 (16.7)	2,371 (16.3)
IV. Children suffering from (or suspected to be suffering from) defects less remediable than defects specified in II or III, distinguishing cases—			
(a) Where complete cure or restora- tion of function (in the case of eye defect, full correction) is considered possible	956 (12.5)	749 (10.9)	1,705 (11.7)
(b) Where improvement only is considered possible, <i>e.g.</i> , without complete restoration of function	440 (5.8)	311 (4.5)	751 (5.2)
Totals	1,396 (18.3)	1,060 (15.4)	2,456 (17.0)
V. Children suffering from defects from which improvement is not considered possible	12 (0.2)	8 (0.1)	20 (0.1)
Total numbers of children examined ...	7,642	6,875	14,517

• Includes 953 children

CHILDREN IN ORDINARY SCHOOLS. CLASSIFICATION
DEFECTS FOUND IN THE INDIVIDUAL CHILD.

EXAMINED IN PERCENTAGES).						No. of CHILDREN EXAMINED (AND PERCENTAGES).		
13-year-olds			16-year-olds			*All ages Totals		
Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
4,672 (72.7)	4,733 (71.5)	9,405 (72.1)	1,044 (75.0)	996 (72.3)	2,040 (73.7)	10,834 (67.8)	10,525 (68.7)	21,359 (68.3)
353 (5.5)	407 (6.1)	760 (5.9)	90 (6.5)	104 (7.5)	194 (7.0)	628 (3.9)	674 (4.4)	1,302 (4.2)
35 (0.5)	34 (0.5)	69 (0.5)	6 (0.4)	1 (0.1)	7 (0.3)	109 (0.7)	82 (0.5)	191 (0.6)
4 (0.1)	1 (0.02)	5 (0.04)	—	—	—	5 (0.03)	2 (0.01)	7 (0.02)
392 (6.1)	442 (6.7)	834 (6.4)	96 (6.9)	105 (7.6)	201 (7.3)	742 (4.6)	758 (4.9)	1,500 (4.8)
635 (9.9)	721 (10.9)	1,356 (10.4)	143 (10.3)	135 (9.8)	278 (10.0)	2,065 (12.9)	2,053 (13.4)	4,118 (13.2)
387 (6.0)	426 (6.4)	813 (6.2)	63 (4.5)	85 (6.2)	148 (5.3)	1,454 (9.1)	1,298 (8.5)	2,752 (8.8)
334 (5.2)	284 (4.3)	618 (4.7)	44 (3.2)	55 (4.0)	99 (3.6)	848 (5.3)	662 (4.3)	1,510 (4.8)
721 (11.2)	710 (10.7)	1,431 (10.9)	107 (7.7)	140 (10.2)	247 (8.9)	2,302 (14.4)	1,960 (12.8)	4,262 (13.6)
10 (0.2)	15 (0.2)	25 (0.2)	2 (0.1)	2 (0.1)	4 (0.1)	27 (0.2)	25 (0.2)	25 (0.2)
6,430	6,621	13,051	1,392	1,378	2,770	15,970	15,321	31,291

outwith normal Age Groups.

TABLE IV—SOCIAL GROUP AND MEDICAL REMEDIABILITY CLASS.

By analysing the information obtained at systematic medical inspection it is possible to show the comparative health conditions of children belonging to each of the so-called Social Groups. In the following table, therefore, the occupations of the parents have been arranged in five groups and related to the medical remediability classifications of Table III.

Numbers and Percentages of Children in Ordinary Schools Placed in Various Medical ("Remediability") Classes arranged according to Social Group of Parent.

Social Group of Parent	1		2		3		4		5		Totals	
	Professional		Clerical		Skilled		Semi-skilled		Labouring			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
I. Children free from defects (other than clothing, cleanliness or minor dental defects)	406	69.5	2,836	72.2	6,194	70.2	7,907	68.4	4,016	62.8	21,359	68.2
II. Children suffering only from slightly defective vision and/or oral sepsis	41	7.0	191	4.9	390	4.4	551	4.7	327	5.1	1,500	4.8
III. Children suffering from temporary defects (other than in II) ...	60	10.3	420	10.7	1,116	12.7	1,465	12.7	1,057	16.5	4,118	13.2
IV. Children suffering from curable or improvable defects	76	13.0	474	12.1	1,107	12.5	1,628	14.1	977	15.3	4,262	13.6
V. Children suffering from defects not considered improvable	1	0.2	6	0.1	15	0.2	12	0.1	18	0.3	52	0.2
Total Numbers of Children Examined	584	100.0	3,927	100.0	8,822	100.0	11,563	100.0	6,395	100.0	31,291	100.0

Perusal of the statistics in the table reveals the following :—

- (1) The percentage of children free from defects (Class I) was greatest for Social Group 2 (Clerical) and diminished progressively for each of the remaining groups. Social Group 1 was the exception to the normal.
- (2) Percentages in Class III increased more or less consistently from Social Groups 1 to 5, less so in Class IV.

TABLE V—SUMMARISED TREATMENT STATISTICS.

					Cases	Attendances
EAR—						
Examined only	...	...	...	...	430	13,771
Clinic treatment	...	...	...	...	1,821	
Aurists' Examinations	...	...	...	...	1,391	2,031
Aurists' Classifications	...	...	...	...	23	23
Audiometric Survey	...	...	...	...	1,254	2,138
EYE					1,317	8,477
SKIN—						
Clinic treatment	...	...	...	...	12,199	110,991
Cleansing clinics	...	...	...	...	713	1,723
Scabies baths	...	...	...	...	722	2,891
DEFECTIVE VISION—						
Clinic treatment	...	...	...	...	10,029	10,029
Spectacles supplied	...	...	...	...	4,690	5,719
EAR, NOSE AND THROAT—						
Aurists' Examinations	...	...	...	...	125	190
Tonsil/Adenoid operations	...	...	...	...	455	1,423
ORTHOPAEDIC—						
Examined only	...	...	...	...	2,034	2,034
Treated by exercises	...	...	...	...	1,133	14,243
Treated in Spastic Unit	...	...	...	...	42	5,678
OTHER DISEASES—						
General	...	...	...	...	7,419	19,124
Supply of medicines	...	...	...	...	4,198	12,304
Artificial Light	...	...	...	...	430	6,882
Cardiac cases	...	...	...	...	128	317

DENTAL—						Cases	Attendances
Ordinary	...	...	...	...	...	18,439	59,835
Orthodontic	...	...	...	...	...	187	4,695
REMAND HOMES	...	...	...	...	...	555	555
DEFECTIVE SPEECH	...	...	...	...	...	2,450	27,823
OCCUPATIONAL THERAPY	...	...	...	...	...	41	2,829

TABLE VI—DENTAL INSPECTION AND TREATMENT.

(1) GENERAL STATISTICS.

Number of Children seen at Routine Dental Inspection								Special and Emer- gency Cases
Age in years	Number Inspected	With Dental Defects	Offered Treat- ment	Accept- ing Treat- ment	Treated	Made Dentally fit	Number Treated	
3 or under	... 4	2	2	1	89	37	97	
4 ...	... 31	21	20	4	92	49	168	
Totals 0-4 years	... 35	23	22	5	181	86	265	
5 ...	... 5,075	3,857	3,764	1,594	1,317	493	428	
6 ...	... 5,882	4,761	4,638	2,101	2,017	915	460	
7 ...	... 5,654	4,716	4,592	2,088	1,980	981	417	
8 ...	... 5,714	4,725	4,580	1,907	2,011	1,088	484	
9 ...	... 5,603	4,495	4,338	1,673	1,877	1,161	461	
10 ...	... 5,315	4,042	3,885	1,435	1,660	1,099	367	
11 ...	... 4,780	3,511	3,362	1,274	1,450	984	368	
12 ...	... 1,561	1,115	1,042	357	987	788	312	
13 ...	... 65	49	49	46	546	476	286	
14 ...	... 127	79	79	78	436	421	270	
15 ...	... 86	47	47	43	154	145	78	
16 ...	... 6	5	5	5	32	41	17	
17 or over	... —	—	—	1	18	16	6	
Total 5-17 + years	39,868	31,402	30,381	12,602	*14,485	8,608	3,954	

No of attendances (including orthodontic) for treatment ; 0- 4 years, 854 ;
5-17 years 58,981 ;
Total, 59,835.

* Includes 1,423 treated by Dental Auxiliaries.

(2) DETAILS OF TREATMENT.

			Routine	Emergency	Total.
Fillings—permanent teeth	...	...	25,930	121	26,051
—deciduous teeth	...	...	7,373	78	7,451
Extractions (not including orthodontic)—					
—permanent teeth	...	...	2,932	770	3,702
—deciduous teeth	...	...	11,124	1,959	13,083
Administration of General Anaesthetic	...		1,186	18	1,204
Other operations—permanent teeth	...		14,844	1,212	16,056
—deciduous teeth	...		7,078	611	7,689
Dentures	...	...	—	—	162
Repairs to dentures	...	...	—	—	16
Radiographs—number of exposures					
(not including orthodontic)	...	...	
intra-oral	...	...	—	—	310
extra-oral	...	...	—	—	5
Number of treatment sessions (including					
Dental Auxiliaries)	...	...	—	—	8,004

(3) ORTHODONTIC TREATMENT.

Cases from previous year, 325 ; new cases, 187 ; completed cases, 142 ; discontinued cases, 34 ; cases continuing at end of year, 336 ; attendances for treatment, 4,695 ; number of treatment sessions, 557.

Diagnostic examinations, 205 ; number of removable appliances fitted, 856 ; repairs to appliances, 41 ; radiographs—intra-oral, 73 ; extra-oral 4.

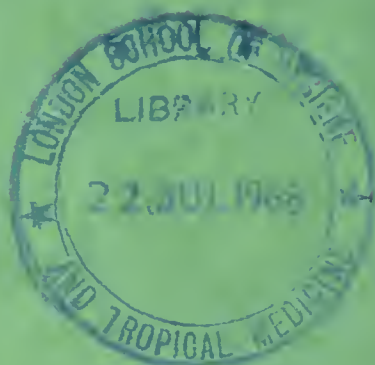
(4) ADDITIONAL INFORMATION.

Fillings of permanent teeth included 26 crowns, 34 gold inlays, 59 root treatments and 4 pulpotomies.

TABLE VII—MORTALITY OF SCHOOL CHILDREN.

*Deaths during Year ended 31st December, 1966,
of Children aged 5-15 years.*

Cause of Death	5-10 years		10-15 years		All Ages		Totals
	Boys	Girls	Boys	Girls	Boys	Girls	
Violence—							
Road Traffic Accidents ...	4	—	2	2	6	2	8
Other violent causes ...	13	6	4	2	17	8	25
Tubercular Meningitis ...	—	1	—	—	—	1	1
Meningococcal Septicaemia ...	1	—	—	—	1	—	1
Measles, Bronco-Pneumonia ...	1	—	—	—	1	—	1
Infective Hepatitis ...	—	—	—	1	—	1	1
Malignant Neoplasms ...	4	3	2	1	6	4	10
Benign and Unspecified Neoplasms ...	—	1	—	—	—	1	1
Diabetes Mellitus ...	1	—	—	—	1	—	1
Epilepsy ...	1	—	—	—	1	—	1
Other Diseases of Nervous System—							
Idiopathic internal hydrocephalus ...	—	—	1	—	1	—	1
Encephalitis ...	—	1	—	—	—	1	1
Cerebral anoxia, mental retardation ...	1	—	—	—	1	—	1
Cerebral haemorrhage ...	2	1	1	1	3	2	5
Pneumonia ...	—	2	1	1	1	3	4
Tracheitis and Pulmonary Oedema ...	—	—	—	1	—	1	1
Nephritis and Nephrosis ...	2	—	—	3	2	3	5
Fibrocystic Disease ...	—	—	1	—	1	—	1
Ventricular Fibrillation ...	—	—	—	1	—	1	1
All other diseases—							
Chronic asthma ...	—	1	—	1	—	2	2
Septicaemia peritonitis ...	—	1	—	—	—	1	1
Chronic pyelonephritis, uraemia ...	—	1	—	2	—	3	3
Asphyxia ...	—	—	1	—	1	—	1
Totals ...	30	18	13	16	43	34	77



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